

clostrdifficile.txt

? b biochem biosci biotech medicine  
>>>W: 76 is unauthorized  
44 is unauthorized  
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3 of the specified files are not available  
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[File 143] Biol. & Agric. Index 1983-2008/Apr  
(c) 2008 The HW Wilson Co. All rights reserved.  
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[File 172] EMBASE Alert 2008/Jun 25  
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(c) 2008 American Chemical Society. All rights reserved.  
\*File 399: use is subject to the terms of your user/customer agreement. IPCR/8 classification codes now searchable as IC=. See HELP NEWSIPCR.  
[File 434] SciSearch(R) Cited Ref Sci 1974-1989/Dec  
(c) 2006 The Thomson Corp. All rights reserved.  
[File 28] Oceanic Abstracts 1966-2008/Jul  
(c) 2008 CSA. All rights reserved.  
[File 35] Dissertation Abs Online 1861-2008/Nov  
(c) 2008 ProQuest Info&Learning. All rights reserved.  
[File 91] MANTIS(TM) 1880-2008/Aug  
2001 (c) Action Potential. All rights reserved.  
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[File 164] Allied & Complementary Medicine 1984-2008/Jun  
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[File 185] Zoological Record Online(R) 1864-2008/Jul  
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[File 357] Derwent Biotech Res. 1982-2008/Jun w1  
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[File 391] Beilstein Database - Reactions 2007/Q4  
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[File 99] Wilson Appl. Sci & Tech Abs 1983-2008/Apr  
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[File 358] Current BioTech Abs 1983-2006/Jan  
(c) 2006 DECHHEMA. All rights reserved.  
\*File 358: This file is no longer updating. Please use File 315, which includes all File 358 records and updates.  
[File 149] TGG Health&Wellness DB(SM) 1976-2008/Jun w2  
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[File 444] New England Journal of Med. 1985-2008/Apr w2  
(c) 2008 Mass. Med. Soc. All rights reserved.

? s clostridium(w)difficile  
209383 CLOSTRIDIUM  
66204 DIFFICILE  
S1 38917 S CLOSTRIDIUM(W)DIFFICILE

?

clostridiumdifficile.txt  
? s s1 or clostridium(w)difficile(w)associated(w)diarrhea  
Processing

38917 S1  
209383 CLOSTRIDIUM  
66204 DIFFICILE  
10186828 ASSOCIATED  
399817 DIARRHEA  
2201 CLOSTRIDIUM(W)DIFFICILE(W)ASSOCIATED(W)DIARRHEA  
S2 38917 S S1 OR CLOSTRIDIUM(W)DIFFICILE(W)ASSOCIATED(W)DIARRHEA

? s s2 and probiotic

38917 S2  
40013 PROBIOTIC  
S3 1086 S S2 AND PROBIOTIC

? s s2 and (probiotic or yogurt or (dietary(w)supplement) or lactobac? or bifidobacter? or Saccharomyces or enterococc? or eubacteria)

Processing  
Processing

38917 S2  
40013 PROBIOTIC  
31995 YOGURT  
1323419 DIETARY  
328900 SUPPLEMENT  
45360 DIETARY(W)SUPPLEMENT  
185228 LACTOBAC?  
38488 BIFIDOBACTER?  
615220 SACCHAROMYCES  
131947 ENTEROCOCC?  
1530098 EUBACTERIA  
S4 9928 S S2 AND (PROBIOTIC OR YOGURT OR (DIETARY(W)SUPPLEMENT) OR LACTOBAC?  
OR BIFIDOBACTER? OR SACCHAROMYCES OR ENTEROCOCC? OR EUBACTERIA)

? s s4 and (immunoglobulin or antibody or antibodies or monoclonal or polyclonal)  
Processing

9928 S4  
1072177 IMMUNOGLOBULIN  
2962512 ANTIBODY  
2787977 ANTIBODIES  
1368770 MONOCLONAL  
267531 POLYCLONAL  
S5 742 S S4 AND (IMMUNOGLOBULIN OR ANTIBODY OR ANTIBODIES OR MONOCLONAL OR  
POLYCLONAL)

? s s4 and ((clostridium(w)difficile(w)toxin(w)A) or  
(clostridium(w)difficile(w)toxin(w)B))

Processing  
Processing

9928 S4  
209383 CLOSTRIDIUM  
66204 DIFFICILE  
872238 TOXIN  
97790705 A

clostrdifficile.txt

3468 CLOSTRIDIUM(W)DIFFICILE(W)TOXIN(W)A  
 209383 CLOSTRIDIUM  
 66204 DIFFICILE  
 872238 TOXIN  
 9572638 B  
 2305 CLOSTRIDIUM(W)DIFFICILE(W)TOXIN(W)B  
 S6 991 S S4 AND ((CLOSTRIDIUM(W)DIFFICILE(W)TOXIN(W)A) OR  
 (CLOSTRIDIUM(W)DIFFICILE(W)TOXIN(W)B))  
  
 ? s s6 and (adminis? or intra or oral)  
 Processing  
 Processing  
 991 S6  
 7963115 ADMINIS?  
 759454 INTRA  
 2812203 ORAL  
 S7 139 S S6 AND (ADMINIS? OR INTRA OR ORAL)  
  
 ? rd  
 >>>W: Duplicate detection is not supported for File 393.  
 Duplicate detection is not supported for File 391.  
 Records from unsupported files will be retained in the RD set.  
 S8 128 RD (UNIQUE ITEMS)  
  
 ? s s8 not py>=2003  
 Processing  
 Processing  
 >>>W: One or more prefixes are unsupported  
 or undefined in one or more files.  
 128 S8  
 39917627 PY>=2003  
 S9 78 S S8 NOT PY>=2003  
  
 ? rd  
 >>>W: Duplicate detection is not supported for File 393.  
 Duplicate detection is not supported for File 391.  
 Records from unsupported files will be retained in the RD set.  
 S10 78 RD (UNIQUE ITEMS)  
  
 ? t s10/3,k/1-78  
 >>>W: KWIC option is not available in file(s): 399  
 10/3,K/1 (Item 1 from file: 5) Links  
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 16991726 Biosis No.: 200200585237  
 Rapid detection of Clostridium difficile in stool using the VIDAS C. difficile Toxin  
 A II assay  
  
 Author: Lipson S M (Reprint); Tortora G; Tempone A; Fedorko G F; Spitzer E D  
 Author Address: VAMC, Northport, NY, USA\*\*USA  
 Journal: Abstracts of the General Meeting of the American Society for Microbiology  
 102 p 133-134 2002 2002  
 Medium: print  
 Conference/Meeting: 102nd General Meeting of the American Society for Microbiology  
 Salt Lake City, UT, USA May 19-23, 2002; 20020519  
 Sponsor: American Society for Microbiology  
 ISSN: 1060-2011  
 Document Type: Meeting; Meeting Abstract  
 Record Type: Abstract  
 Language: English  
 Rapid detection of Clostridium difficile in stool using the VIDAS C. difficile Toxin  
 A II assay

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**Abstract:** A rapid laboratory diagnosis of Clostridium difficile- associated diarrhea is important in patient management and in the administration of appropriate therapeutic modalities. The VIDAS C. difficile Toxin II (CDA 2) assay (bioMerieux, Inc...).

**DESCRIPTORS:**

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms

Organisms: Clostridium difficile (Endospore-forming Gram-Positives...)

Common Taxonomic Terms: ...Eubacteria;

Diseases: Clostridium difficile-associated diarrhea--

Chemicals & Biochemicals: Clostridium difficile toxin A

Methods & Equipment: ...VIDAS Clostridium difficile Toxin A II assay ...

Geographical Name:

10/3,K/2 (Item 2 from file: 5) Links

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16835308 Biosis No.: 200200428819

Impairment of autoregulatory vasodilation by NAD(P)H oxidase-dependent superoxide generation during acute stage of subarachnoid hemorrhage in rat pial artery

Author: Shin Hwa Kyoung; Lee Jeong Hyun; Kim Ki Young; Kim Chi Dae; Lee Won Suk; Rhim Byung Yong; Hong Ki Whan (Reprint)

Author Address: Department of Pharmacology, College of Medicine, Pusan National University, Ami-Dong 1-Ga, Seo-Gu, Pusan, 602-739, South Korea\*\*South Korea

Journal: Journal of Cerebral Blood Flow and Metabolism 22 ( 7 ): p 869-877 July, 2002 2002

Medium: print

ISSN: 0271-678X

Document Type: Article

Record Type: Abstract

Language: English

**Abstract:** ...NG-nitro-L-arginine methyl ester (L-NAME) (10 mg/kg) was inhibited by intracisternal administration of a tyrosine kinase inhibitor genistein (10  $\mu$ mol/L) and Rac inhibitor Clostridium difficile toxin B (1 ng/mL) and a flavoenzyme inhibitor diphenyleneiodonium (10  $\mu$ mol/L). The expression of gp91phox...

**DESCRIPTORS:**

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms

Organisms: Clostridium difficile (Endospore-forming Gram-Positives...)

Common Taxonomic Terms: ...Eubacteria;

Diseases:

Chemicals & Biochemicals: Clostridium difficile toxin B;

10/3,K/3 (Item 3 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

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16520733 Biosis No.: 200200114244

Small bowel review: Diseases of the small intestine

Author: Thomson A B R (Reprint); Keelan M; Thiesen A; Clandinin M T; Ropeleski M; Wild G E

Author Address: University of Alberta, 519 Newton Research Building, Edmonton, AB, Canada\*\* Canada

Journal: Digestive Diseases and Sciences 46 ( 12 ): p 2555-2566 December, 2001 2001

Medium: print

ISSN: 0163-2116

clostridifficile.txt

Document Type: Article; Literature Review  
Record Type: Abstract  
Language: English

Abstract: ...to be useful in reducing gut ischemia in patients with septic shock; and (7) the administration of recombinant human fibroblast growth factor-2 may prove to be useful to prevent radiation...

DESCRIPTORS:

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms  
Organisms: Clostridium difficile (Endospore-forming Gram-Positives...  
Common Taxonomic Terms: ...Eubacteria;  
Diseases: Clostridium difficile infection.  
Chemicals & Biochemicals: Clostridium difficile toxin A--

10/3,K/4 (Item 4 from file: 5) Links

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16413533 Biosis No.: 200200007044

Treatment of bacterial infections

Author: Bundle David R (Reprint); Kitov Pavel; Read Randy J; Ling Hong; Armstrong Glen

Author Address: Edmonton, Canada\*\*Canada

Journal: Official Gazette of the United States Patent and Trademark Office Patents 1251 ( 5 ): Oct. 30, 2001 2001

Medium: e-file

Patent Number: US 6310043 Patent Date Granted: October 30, 2001 20011030 Patent

Classification: 514-25 Patent Assignee: Governors of the University of Alberta, Edmonton, Canada Patent Country: USA

ISSN: 0098-1133

Document Type: Patent

Record Type: Abstract

Language: English

Abstract: ...such as those from salmonella, campylobacter and other bacteria, verotoxins from E. coli, cholera toxin, clostridium difficile toxins A and B, bacterial pili from enteropathogenic E. coli (EPEC) and enterotoxigenic E. coli... ...affinity of the compounds relative to the ligands themselves. In one embodiment, the compounds, when administered in a timely fashion to a patient suffering from enteric E. coli infection, inhibit progression...

DESCRIPTORS:

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms... ...Eubacteria, Bacteria, Microorganisms... ...Facultatively Anaerobic Gram-Negative Rods, Eubacteria, Bacteria, Microorganisms

Organisms: ...Clostridium difficile (Endospore-forming Gram-Positives

Common Taxonomic Terms: ...Eubacteria;

Diseases:

Chemicals & Biochemicals: clostridium difficile toxin A--... ...clostridium difficile toxin B--

10/3,K/5 (Item 5 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

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16267851 Biosis No.: 200100439690

The capsaicin VR1 receptor mediates substance P release in toxin A-induced enteritis in rats

Author: McVey Douglas C; Vigna Steven R (Reprint)

Author Address: Departments of Cell Biology and Medicine, Duke University Medical Center and Durham V. A. Medical Center, Durham, NC, 27710, USA\*\*USA

clostridifficile.txt

Journal: Peptides (New York) 22 ( 9 ): p 1439-1446 September, 2001 2001  
Medium: print  
ISSN: 0196-9781  
Document Type: Article  
Record Type: Abstract  
Language: English

**Abstract:** The mechanism by which *Clostridium difficile* toxin A causes substance P (SP) release and subsequent inflammation in the rat ileum is unknown. Pretreatment with the vanilloid receptor subtype 1 (VR1) antagonist, capsazepine, before toxin A administration significantly inhibited toxin A-induced SP release and intestinal inflammation. Intraluminal administration of the VR1 agonist capsaicin caused intestinal inflammation similar to the effects of toxin A. Pretreatment with capsazepine before capsaicin administration also significantly inhibited capsaicin-induced intestinal inflammation. These results suggest that intraluminal toxin A causes...

**DESCRIPTORS:**

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms  
Organisms: *Clostridium difficile* (Endospore-forming Gram-Positives...  
Common Taxonomic Terms: ...Eubacteria;  
Diseases:

10/3,K/6 (Item 6 from file: 5) Links  
Fulltext available through: STIC Full Text Retrieval Options  
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16227446 Biosis No.: 200100399285  
Involvement of nerves and calcium channels in the intestinal response to *Clostridium difficile* toxin A: An experimental study in rats *in vivo*

Author: Sorensson J; Jodal M; Lundgren O (Reprint)  
Author Address: Department of Physiology, 405 30, Goteborg, Sweden\*\*Sweden  
Journal: Gut 49 ( 1 ): p 56-65 July, 2001 2001  
Medium: print  
ISSN: 0017-5749  
Document Type: Article  
Record Type: Abstract  
Language: English  
Involvement of nerves and calcium channels in the intestinal response to *Clostridium difficile* toxin A: An experimental study in rats *in vivo*

**Abstract:** Background: The involvement of nerves and calcium channels in the intestinal response to *Clostridium difficile* toxin A (luminal concentration 1 or 15  $\mu$ g/ml) was studied in the small intestine of rats... ...by the toxin was significantly attenuated by intravenous hexamethonium whereas no effect was observed after administration of nifedipine or granisetron. Conclusions: At a low toxin concentration, intramural reflexes are involved in...

**DESCRIPTORS:**

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms  
Organisms: *Clostridium difficile* (Endospore-forming Gram-Positives...  
Common Taxonomic Terms: ...Eubacteria;  
Diseases:

Chemicals & Biochemicals: ...*Clostridium difficile* toxin A;

10/3,K/7 (Item 7 from file: 5) Links  
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16141496 Biosis No.: 200100313335  
Endogenous corticosteroids modulate *Clostridium difficile* toxin A-induced enteritis

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in rats

Author: Castagliuolo Ignazio; Karalis Katia; Valenick Leyla; Pasha Asiya; Nikulasson Sigfus; Wlk Michael; Pothoulakis Charalabos (Reprint)

Author Address: Div. of Gastroenterology, Beth Israel Hospital, Harvard Medical School, 330 Brookline Ave., Dana 501, Boston, MA, 02115, USA\*\*USA

Journal: American Journal of Physiology 280 (4 Part 1): p G539-G545 April, 2001 2001

Medium: print

ISSN: 0002-9513

Document Type: Article

Record Type: Abstract

Language: English

Endogenous corticosteroids modulate Clostridium difficile toxin A-induced enteritis in rats

**Abstract:** We examined the role of glucocorticoids in acute inflammatory diarrhea mediated by *Clostridium difficile* toxin A. Toxin A (5  $\mu$ g) of buffer was injected in rat ileal loops, and intestinal responses were measured after 30 min to 4 h. Ileal toxin A administration increased plasma glucocorticoids after 1 h, at which time the toxin-stimulated secretion was not significant. Administration of the glucocorticoid analog dexamethasone inhibited toxin A-induced intestinal secretion and inflammation and downregulated... doses suggested that intestinal responses to toxin A were related to circulating levels of glucocorticoids. Administration of the glucocorticoid receptor antagonist RU-486 enhanced toxin A-mediated intestinal secretion and inflammation...

**DESCRIPTORS:**

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms

Organisms: *Clostridium difficile* (Endospore-forming Gram-Positives...)

Common Taxonomic Terms: ...Eubacteria;

Diseases:

10/3,K/8 (Item 8 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

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16040126 Biosis No.: 200100211965

*Saccharomyces boulardii* stimulates intestinal immunoglobulin A immune response to *Clostridium difficile* toxin A in mice

Author: Qamar Amir; Aboudola Samer; Warny Michel; Michetti Pierre; Pothoulakis Charalabos; Lamont J Thomas; Kelly Ciaran P (Reprint)

Author Address: Gastroenterology, Beth Israel Deaconess Medical Center, 330 Brookline Ave., Dana 601, Boston, MA, 02215, USA\*\*USA

Journal: Infection and Immunity 69 (4): p 2762-2765 April, 2001 2001

Medium: print

ISSN: 0019-9567

Document Type: Article

Record Type: Abstract

Language: English

*Saccharomyces boulardii* stimulates intestinal immunoglobulin A immune response to *Clostridium difficile* toxin A in mice

**Abstract:** *Saccharomyces boulardii* is a nonpathogenic yeast that protects against antibiotic-associated diarrhea and recurrent *Clostridium difficile* colitis. The administration of *C. difficile* toxoid A by gavage to *S. boulardii*-fed BALB/c mice caused...

**DESCRIPTORS:**

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms

Organisms: *Saccharomyces boulardii* (Ascomycetes... ...*Clostridium difficile*

clostridium difficile.txt

(Endospore-forming Gram-Positives

Common Taxonomic Terms: ...Eubacteria;

Diseases:

Chemicals & Biochemicals: Clostridium difficile toxin A;

10/3,K/9 (Item 9 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

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15994245 Biosis No.: 200100166084

Novel targets for the pharmacotherapy of diarrhoea: A view for the millennium

Author: Farthing Michael J G (Reprint)

Author Address: Digestive Diseases Research Centre, St Bartholomew's and Royal London School of Medicine and Dentistry, Turner Street, London, UK\*\*UK

Journal: Journal of Gastroenterology and Hepatology 15 ( Supplement G ): p G38-G45 October, 2000 2000

Medium: print

ISSN: 0815-9319

Document Type: Article; Literature Review

Record Type: Abstract

Language: English

Abstract: ...with organisms that damage the intestinal epithelium (enteropathogenic *E. coli*, *Shigella* sp., *Salmonella* sp.). Although oral rehydration therapy has reduced the mortality associated with acute diarrhoea, the diarrhoea attack rate remains... . . . polypeptide and neural reflexes within the enteric nervous system. Cholera toxin, *E. coli* enterotoxins and Clostridium difficile toxin A are known to invoke these mechanisms in diarrhoea pathogenesis. This new dimension of intestinal pathophysiology...

DESCRIPTORS:

Biosystematic Names: ...Facultatively Anaerobic Gram-Negative Rods, Eubacteria, Bacteria, Microorganisms... . . . Facultatively Anaerobic Gram-Negative Rods, Eubacteria, Bacteria, Microorganisms

Organisms:

Common Taxonomic Terms: ...Eubacteria;

Diseases:

Chemicals & Biochemicals: Clostridium difficile toxin A;

Methods & Equipment: ...oral rehydration therapy

Geographical Name:

10/3,K/10 (Item 10 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

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15959370 Biosis No.: 200100131209

Pseudomembranous colitis caused by clindamycin phosphate vaginal cream

Author: Gorske Andrew C (Reprint); Holtzmuller Kent C (Reprint)

Author Address: Department of Gastroenterology, Walter Reed Army Medical Center, Washington, DC, USA\*\*USA

Journal: American Journal of Gastroenterology 95 ( 9 ): p 2575 September, 2000 2000

Medium: print

Conference/Meeting: 65th Annual Scientific Meeting of the American College of Gastroenterology New York, New York, UK October 13-18, 2000; 20001013

Sponsor: American College of Gastroenterology

ISSN: 0002-9270

Document Type: Meeting; Meeting Abstract

Record Type: Citation

Language: English

clostridifficile.txt

DESCRIPTORS:

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms  
Organisms: Clostridium difficile (Endospore-forming Gram-Positives...  
Common Taxonomic Terms: ...Eubacteria;

Diseases:

Chemicals & Biochemicals: Clostridium difficile toxin A--...  
...antibacterial-drug, cream preparation, intravaginal administration;

10/3,K/11 (Item 11 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

Biosis Previews(R)

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15468349 Biosis No.: 200000186662

Clostridium difficile recombinant toxin A repeating units as a carrier protein for conjugate vaccines: Studies of pneumococcal type 14, Escherichia coli K1, and Shigella flexneri type 2a polysaccharides in mice

Author: Pavliakova Danka; Moncrief J Scott; Lyerly David M; Schiffman Gerald; Bryla Dolores A; Robbins John B; Schneerson Rachel (Reprint)

Author Address: National Institutes of Health, Building 6, Room 424, Bethesda, MD, 20892, USA\*\*USA

Journal: Infection and Immunity 68 ( 4 ): p 2161-2166 April, 2000 2000

Medium: print

ISSN: 0019-9567

Document Type: Article

Record Type: Abstract

Language: English

Clostridium difficile recombinant toxin A repeating units as a carrier protein for conjugate vaccines: Studies of pneumococcal...

Abstract: ...the native protein, a nontoxic peptide (repeating unit of the native toxin designated rARU) from Clostridium difficile toxin A (CDTA) afforded an antigen that could be bound covalently to the surface polysaccharides of pneumococcus...  
...prior treatment of rARU with succinic anhydride. Conjugates, prepared with rARU or succinylated (rARUsucc), were administered to mice by a clinically relevant dosage and immunization scheme. All conjugates elicited high levels...

DESCRIPTORS:

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms... ...Facultatively Anaerobic Gram-Negative Rods, Eubacteria, Bacteria, Microorganisms

Organisms: Clostridium difficile (Endospore-forming Gram-Positives...  
Common Taxonomic Terms: ...Eubacteria;

Diseases: Clostridium difficile infection

10/3,K/12 (Item 12 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

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15456798 Biosis No.: 200000175111

Factors associated with nosocomial diarrhea and Clostridium difficile-associated disease on the adult wards of an urban tertiary care hospital

Author: Schwaber M J; Simhon A; Block C; Roval V; Ferderber N; Shapiro M (Reprint)

Author Address: Department of Clinical Microbiology and Infectious Diseases, Hadassah University Hospital, Jerusalem, 91120, Israel\*\*Israel

Journal: European Journal of Clinical Microbiology and Infectious Diseases 19 ( 1 ): p 9-15 Jan., 2000 2000

Medium: print

ISSN: 0934-9723

Document Type: Article

Record Type: Abstract

clostridium\_difficile.txt

Language: English

Factors associated with nosocomial diarrhea and Clostridium difficile-associated disease on the adult wards of an urban tertiary care hospital

Abstract: ...conducted to determine factors associated with the development of nosocomial diarrhea and the acquisition of Clostridium difficile-associated disease. During the 3-month survey, 98 patients with nosocomial diarrhea were enrolled, and... ...in beds adjacent to the affected patients. Factors significantly associated with nosocomial diarrhea were the administration of a special diet (P=0.02) and receipt of a greater number of different antibiotics (P=0.02). Among the 98 patients with diarrhea, Clostridium difficile toxin B was identified in the stool of 13. Factors found to be associated with the presence...

DESCRIPTORS:

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms

Organisms: Clostridium difficile (Endospore-forming Gram-Positives...

Common Taxonomic Terms: ...Eubacteria;

Diseases: Clostridium difficile-associated disease...

Chemicals & Biochemicals: Clostridium difficile toxin B--

Miscellaneous Terms: Concept Codes: antibiotic administration effects...

10/3,K/13 (Item 13 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

Biosis Previews(R)

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15066160 Biosis No.: 199900325820

Saccharomyces boulardii stimulates an intestinal IGA immune response to Clostridium difficile toxin a in mice

Author: Qamar A (Reprint); Warny M (Reprint); Michetti P; Pothoulakis C; LaMont J T ; Kelly C P

Author Address: Beth Israel Deaconess Med Ctr, Harvard Med Sch, Boston, MA, USA\*\*USA

Journal: Gastroenterology 116 ( 4 PART 2 ): p A894 April, 1999 1999

Medium: print

Conference/Meeting: Digestive Disease Week and the 100th Annual Meeting of the American Gastroenterological Association Orlando, Florida, USA May 16-19, 1999; 19990516

Sponsor: American Gastroenterological Association

ISSN: 0016-5085

Document Type: Meeting; Meeting Abstract

Record Type: Citation

Language: English

Saccharomyces boulardii stimulates an intestinal IGA immune response to Clostridium difficile toxin a in mice

DESCRIPTORS:

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms

Organisms: Saccharomyces boulardii {yeast} (Ascomycetes... ...Clostridium difficile (Endospore-forming Gram-Positives

Common Taxonomic Terms: ...Eubacteria;

Diseases:

Chemicals & Biochemicals: ...Clostridium difficile toxin A--

Methods & Equipment: oral Clostridium difficile toxin A immunization...

Geographical Name:

10/3,K/14 (Item 14 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

Biosis Previews(R)

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14510670 Biosis No.: 199800304917

*clostridium difficile.txt*  
Clostridium difficile toxin B induces apoptosis in intestinal cultured cells

Author: Fiorentini Carla (Reprint); Fabbri Alessia; Falzano Loredana; Fattorossi Andrea; Matarrese Paola; Rivabene Roberto; Donelli Gianfranco  
Author Address: Dep. Ultrastructures, Istituto Superiore Sanita, Viale Regina Elena 299, 00161 Rome, Italy\*\*Italy

Journal: Infection and Immunity 66 ( 6 ): p 2660-2665 June, 1998

Medium: print

ISSN: 0019-9567

Document Type: Article

Record Type: Abstract

Language: English

Clostridium difficile toxin B induces apoptosis in intestinal cultured cells

Abstract: Toxigenic strains of the anaerobic bacterium Clostridium difficile produce at least two large, single-chain protein exotoxins involved in the pathogenesis of antibiotic...

DESCRIPTORS:

Major Concepts: ...Dental and Oral System...

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms

Organisms: Clostridium-difficile (Endospore-forming Gram-Positives...)

Organisms: Parts Etc:

Common Taxonomic Terms: ...Eubacteria;

Diseases:

10/3,K/15 (Item 15 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

Biosis Previews(R)

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14493636 Biosis No.: 199800287883

Role of endogenous glucocorticoids on Clostridium difficile toxin A (TxA) enteritis

Author: Castagliuolo I; Karalis K; Pasha A; Valenick L; Pothoulakis C

Author Address: Gastroenterol., Beth Isr. Deaconess Med. Cent., Boston, MA, USA\*\*USA

Journal: Gastroenterology 114 ( 4 PART 2 ): p A949 April 15, 1998

Medium: print

Conference/Meeting: Digestive Diseases Week and the 99th Annual Meeting of the American Gastroenterological Association New Orleans, Louisiana, USA May 16-22, 1998; 19980516

Sponsor: American Association for the Study of Liver Diseases

American Gastroenterological Association

American Society for Gastrointestinal Endoscopy

Gastroenterology Research Group

Society for Surgery of the Alimentary Tract

ISSN: 0016-5085

Document Type: Meeting; Meeting Abstract

Record Type: Citation

Language: English

Role of endogenous glucocorticoids on Clostridium difficile toxin A (TxA) enteritis

DESCRIPTORS:

Major Concepts: ...Dental and Oral System...

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms

Organisms: Clostridium-difficile (Endospore-forming Gram-Positives...)

Organisms: Parts Etc:

Common Taxonomic Terms: ...Eubacteria;

Diseases:

10/3,K/16 (Item 16 from file: 5) Links

*clostridifficile.txt*

Fulltext available through: STIC Full Text Retrieval Options  
Biosis Previews(R)

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14493635 Biosis No.: 199800287882

Oligosaccharides containing sialic acid and N-acetyl-glucosamine mediate Clostridium difficile toxin B (TxB) binding and biologic effects in human colonic mucosa

Author: Castagliuolo I; Valenick L; Riegler M; Lamont J T; Pothoulakis C  
Author Address: Beth Isr. Deaconess Med. Cent., Harv. Med. Sch., Boston, MA,  
USA\*\*USA

Journal: Gastroenterology 114 ( 4 PART 2 ): p A949 April 15, 1998 1998

Medium: print

Conference/Meeting: Digestive Diseases Week and the 99th Annual Meeting of the  
American Gastroenterological Association New Orleans, Louisiana, USA May 16-22,  
1998; 19980516

Sponsor: American Association for the Study of Liver Diseases

American Gastroenterological Association

American Society for Gastrointestinal Endoscopy

Gastroenterology Research Group

Society for Surgery of the Alimentary Tract

ISSN: 0016-5085

Document Type: Meeting; Meeting Abstract

Record Type: Citation

Language: English

Oligosaccharides containing sialic acid and N-acetyl-glucosamine mediate Clostridium difficile toxin B (TxB) binding and biologic effects in human colonic mucosa

**DESCRIPTORS:**

Major Concepts: ...Dental and Oral System...

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms

Organisms: Clostridium-difficile (Endospore-forming Gram-Positives...)

Organisms: Parts Etc:

Common Taxonomic Terms: ...Eubacteria;

Diseases:

10/3,K/17 (Item 17 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

Biosis Previews(R)

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14493634 Biosis No.: 199800287881

Early intracellular signalling of Clostridium difficile toxin A (TXA) in rat ileum  
involves a protein tyrosine kinase-dependent pathway

Author: Castagliuolo I; Valenick L; Previte G J; Pasha A; Wang C C; Kelly C P;  
Lamont J T; Pothoulakis C

Author Address: Div. Gastroenterol., Beth Isr. Deaconess Med. Cent., Harv. Med.  
Sch., Boston, MA, USA\*\*USA

Journal: Gastroenterology 114 ( 4 PART 2 ): p A949 April 15, 1998 1998

Medium: print

Conference/Meeting: Digestive Diseases Week and the 99th Annual Meeting of the  
American Gastroenterological Association New Orleans, Louisiana, USA May 16-22,  
1998; 19980516

Sponsor: American Association for the Study of Liver Diseases

American Gastroenterological Association

American Society for Gastrointestinal Endoscopy

Gastroenterology Research Group

Society for Surgery of the Alimentary Tract

ISSN: 0016-5085

Document Type: Meeting; Meeting Abstract

Record Type: Citation

Language: English

Early intracellular signalling of Clostridium difficile toxin A (TXA) in rat ileum

clostrdifficile.txt  
involves a protein tyrosine kinase-dependent pathway

**DESCRIPTORS:**

Major Concepts: ...Dental and Oral System...

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms

Organisms: Clostridium-difficile (Endospore-forming Gram-Positives...

Organisms: Parts Etc:

Common Taxonomic Terms: ...Eubacteria;

Diseases:

10/3,K/18 (Item 18 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

Biosis Previews(R)

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14493633 Biosis No.: 199800287880

Saccharomyces boulardii protease inhibits Clostridium difficile toxin A and B-induced effects in human colonic mucosa

Author: Castagliuolo I; Valenick L; Riegler M; Lamont J T; Pothoulakis C  
Author Address: Div. Gastroenterol., Beth Isr. Deaconess Med. Cent., Harv. Med. Sch., Boston, MA, USA\*\*USA

Journal: Gastroenterology 114 ( 4 PART 2 ): p A948-A949 April 15, 1998 1998

Medium: print

Conference/Meeting: Digestive Diseases Week and the 99th Annual Meeting of the American Gastroenterological Association New Orleans, Louisiana, USA May 16-22, 1998; 19980516

Sponsor: American Association for the Study of Liver Diseases

American Gastroenterological Association

American Society for Gastrointestinal Endoscopy

Gastroenterology Research Group

Society for Surgery of the Alimentary Tract

ISSN: 0016-5085

Document Type: Meeting; Meeting Abstract

Record Type: Citation

Language: English

Saccharomyces boulardii protease inhibits Clostridium difficile toxin A and B-induced effects in human colonic mucosa

**DESCRIPTORS:**

Major Concepts: ...Dental and Oral System...

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms

Organisms: Saccharomyces-boulardii (Ascomycetes... ...Clostridium-difficile (Endospore-forming Gram-Positives

Organisms: Parts Etc:

Common Taxonomic Terms: ...Eubacteria;

Diseases:

10/3,K/19 (Item 19 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

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14467853 Biosis No.: 199800262100

Antibodies to recombinant Clostridium difficile toxins A and B are an effective treatment and prevent relapse of C. difficile-associated disease in a hamster model of infection

Author: Kink John A (Reprint); Williams Jim A

Author Address: Ophidian Pharmaceuticals Inc., 5445 East Cheryl Pkwy., Madison, WI 53711, USA\*\*USA

Journal: Infection and Immunity 66 ( 5 ): p 2018-2025 May, 1998 1998

Medium: print

clostridium difficile.txt

ISSN: 0019-9567

Document Type: Article

Record Type: Abstract

Language: English

Antibodies to recombinant Clostridium difficile toxins A and B are an effective treatment and prevent relapse of C. difficile-associated ...

**Abstract:** Clostridium difficile causes antibiotic-associated diarrhea and colitis in humans through the actions of toxin A and... ...This study examined the role of both toxins in pathogenesis and the ability of orally administered avian antibodies against recombinant epitopes of toxin A and toxin B to treat C difficile...

**DESCRIPTORS:**

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms

Organisms: Clostridium-difficile (Endospore-forming Gram-Positives...)

Common Taxonomic Terms: ...Eubacteria;

Diseases:

Chemicals & Biochemicals: anti-Clostridium difficile toxin A antibody...  
...anti-Clostridium difficile toxin B antibody ... ...recombinant Clostridium difficile toxin A; ... ...recombinant Clostridium difficile toxin B

10/3,K/20 (Item 20 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

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14464242 Biosis No.: 199800258489

Direct evidence of mast cell involvement in Clostridium difficile toxin A-induced enteritis in mice

Author: Wershil Barry K (Reprint); Castagliuolo Ignazio; Pothoulakis Charalabos

Author Address: Combined Program Pediatric Gastroenterology Nutr., Mass. General Hosp., 149 13th St., Charlestown, MA 02129, USA\*\*USA

Journal: Gastroenterology 114 ( 5 ): p 956-964 May, 1998 1998

Medium: print

ISSN: 0016-5085

Document Type: Article

Record Type: Abstract

Language: English

Direct evidence of mast cell involvement in Clostridium difficile toxin A-induced enteritis in mice

**Abstract:** Background and Aims: The pathogenesis of Clostridium difficile toxin A-induced intestinal inflammation is not completely understood. The aim of this study was to define... ...Mast cell reconstituted KitW/KitW-v mice showed responses similar to the normal congenic mice. Administration of a specific substance P-receptor antagonist (CP-96,345) reduced toxin A-induced intestinal...

**DESCRIPTORS:**

Major Concepts: Dental and Oral System...

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms

Organisms: Clostridium-difficile (Endospore-forming Gram-Positives...)

Organisms: Parts Etc:

Common Taxonomic Terms: ...Eubacteria;

Diseases:

Chemicals & Biochemicals: ...Clostridium difficile toxin A;

10/3,K/21 (Item 21 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

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14334867 Biosis No.: 199800129114

*clostridium difficile.txt*

CGRP upregulation in dorsal root ganglia and ileal mucosa during Clostridium difficile toxin A-induced enteritis

Author: Keates Andrew C; Castagliuolo Ignazio; Qiu Bosheng; Nikulasson Sigfus; Sengupta Ashok; Pothoulakis Charalabos (Reprint)

Author Address: Div. Gastroenterol., Beth Israel Deaconess Med. Cent., Dana 601, Boston, MA 02215, USA\*\*USA

Journal: American Journal of Physiology 274 ( 1 PART 1 ): p G196-G202 Jan., 1998

1998

Medium: print

ISSN: 0002-9513

Document Type: Article

Record Type: Abstract

Language: English

CGRP upregulation in dorsal root ganglia and ileal mucosa during Clostridium difficile toxin A-induced enteritis

Abstract: ...P receptor antagonist) dramatically inhibits fluid secretion and intestinal inflammation in ileal loops exposed to Clostridium difficile toxin A. The aim of this study was to determine whether calcitonin gene-related peptide (CGRP), a neuropeptide also found in sensory afferent neurons, participates in the enterotoxic effects of toxin A. Administration of toxin A was also found to increase CGRP content in dorsal root ganglia and...

DESCRIPTORS:

Major Concepts: Dental and Oral System...

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms

Common Taxonomic Terms: ...Eubacteria;

Diseases: Clostridium difficile toxin A-induced enteritis ...

10/3, K/22 (Item 22 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

Biosis Previews(R)

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14236114 Biosis No.: 199800030361

Epidermal growth factor attenuates Clostridium difficile toxin A- and B-induced damage of human colonic mucosa

Author: Riegler Martin; Sedivy Roland; Sogukoglu Tacettin; Castagliuolo Ignazio; Pothoulakis Charalabos (Reprint); Cosentini Enrico; Bischof Georg; Hamilton Gerhard; Teleky Bela; Feil Wolfgang; Lamont J Thomas; Wenzl E

Author Address: Beth Israel Deaconess Med. Cent., Div. Gastroenterol., 330 Brookline Ave., Boston, MA 02215, USA\*\*USA

Journal: American Journal of Physiology 273 ( 5 PART 1 ): p G1014-G1022 Nov., 1997

1997

Medium: print

ISSN: 0002-9513

Document Type: Article

Record Type: Abstract

Language: English

Epidermal growth factor attenuates Clostridium difficile toxin A- and B-induced damage of human colonic mucosa

Abstract: ...on gastrointestinal epithelia via a receptor-mediated mechanism. We investigated the effect of EGF on Clostridium difficile toxin A (Tx A)- and toxin B (Tx B)-induced damage of human colon. Ussing-chambered colonic mucosa was... . These effects were inhibited by prior, but not simultaneous, serosal application of EGF (20 nM). Administration of the tyrosine kinase inhibitor genistein (10-6 M) inhibited the protective effects of EGF...

DESCRIPTORS:

Major Concepts: Dental and Oral System...

clostridifficile.txt

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms  
Organisms: Clostridium-difficile (Endospore-forming Gram-Positives...  
Organisms: Parts Etc:  
Common Taxonomic Terms: ...Eubacteria;  
Diseases:  
Chemicals & Biochemicals: ...Clostridium difficile toxin A--... ...Clostridium difficile toxin B--

10/3,K/23 (Item 23 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

Biosis Previews(R)

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14101432 Biosis No.: 199799735492

IL-11 inhibits Clostridium difficile toxin A enterotoxicity in rat ileum

Author: Castagliuolo Ignazio; Kelly Ciaran P; Qiu Bo Sheng; Nikulasson Sigfus T; Lamont J Thomas; Pothoulakis Charalabos (Reprint)  
Author Address: Div. Gastroenterol., Dana 601, Beth Israel Deaconess Med. Cent., 330 Brookline Ave., Boston, MA 02215, USA\*\*USA  
Journal: American Journal of Physiology 273 ( 2 PART 1 ): p G333-G341 1997 1997  
ISSN: 0002-9513  
Document Type: Article  
Record Type: Abstract  
Language: English

IL-11 inhibits Clostridium difficile toxin A enterotoxicity in rat ileum

Abstract: ...explore the action of recombinant human IL-11 (rhIL-11) on the intestinal effects of Clostridium difficile toxin A, an inflammatory enterotoxin, and cholera toxin, a noninflammatory enterotoxin in rat ileum. We administered rhIL-11 subcutaneously to rats before injection of toxin A into ileal loops and measured...

DESCRIPTORS:

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms  
Organisms: ...Clostridium difficile (Endospore-forming Gram-Positives  
Common Taxonomic Terms: ...Eubacteria;  
Diseases:  
Miscellaneous Terms: Concept Codes: ...CLOSTRIDIUM DIFFICILE TOXIN A;

10/3,K/24 (Item 24 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

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14010726 Biosis No.: 199799644786

Protective immunity against Clostridium difficile toxin A induced by oral immunization with a live, attenuated Vibrio cholerae vector strain

Author: Ryan Edward T; Butterton Joan R; Smith Rex Neal; Carroll Patricia A; Crean Thomas I; Calderwood Stephen B (Reprint)  
Author Address: Div. Infectious Diseases, Massachusetts General Hosp., Boston, MA 02114, USA\*\*USA  
Journal: Infection and Immunity 65 ( 7 ): p 2941-2949 1997 1997  
ISSN: 0019-9567  
Document Type: Article  
Record Type: Abstract  
Language: English  
Protective immunity against Clostridium difficile toxin A induced by oral immunization with a live, attenuated Vibrio cholerae vector strain

Abstract: Clostridium difficile causes pseudomembranous colitis through the action  
Page 17

*clostridifficile.txt*

of Rho-modifying proteins, toxins A and B. Antibodies... *V. cholerae* vector containing pETR14 was recoverable from rabbit ilea up to 5 days after oral inoculation. Vaccination produced significant systemic anti-*C. difficile* toxin A immunoglobulin G and anti-*V...*

DESCRIPTORS:

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms... ...Facultatively Anaerobic Gram-Negative Rods, Eubacteria, Bacteria, Microorganisms... ...Facultatively Anaerobic Gram-Negative Rods, Eubacteria, Bacteria, Microorganisms Organisms: ...*Clostridium difficile* (Endospore-forming Gram-Positives Common Taxonomic Terms: ...Eubacteria; Diseases:

10/3,K/25 (Item 25 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

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13977284 Biosis No.: 199799611344

The involvement of macrophage-derived tumour necrosis factor and lipoxygenase products on the neutrophil recruitment induced by *Clostridium difficile* toxin B

Author: Souza M H L P; Melo-Filho A A; Rocha M F G; Lyerly D M; Cunha F Q; Lima A A M; Ribeiro R A (Reprint)

Author Address: Dep. Physiol. Pharmacol., Centre Health Sci., Federal Univ. Ceara, Rua Coronel Nunes de Melo, 1127, 60 430-270 Fortaleza, CE, Brazil\*\*Brazil

Journal: Immunology 91 ( 2 ): p 281-288 1997 1997

ISSN: 0019-2805

Document Type: Article

Record Type: Abstract

Language: English

...of macrophage-derived tumour necrosis factor and lipoxygenase products on the neutrophil recruitment induced by *Clostridium difficile* toxin B

Abstract: *Clostridium difficile* (Cd) toxins appear to mediate the inflammatory response in pseudomembranous colitis and/or colitis associated ... activating factor antagonist), inhibited the neutrophil migration evoked by TxB. Pretreatment with dexamethasone or the administration of anti-TNF-alpha serum into the air-pouches also significantly reduced the TxB-induced...

DESCRIPTORS:

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms

Organisms: ...*Clostridium difficile* (Endospore-forming Gram-Positives

Common Taxonomic Terms: ...Eubacteria;

Diseases:

Miscellaneous Terms: Concept Codes: ...CLOSTRIDIUM-DIFFICILE TOXIN B;

10/3,K/26 (Item 26 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

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13659936 Biosis No.: 19979929396

Substance P activation of enteric neurons in response to intraluminal *Clostridium difficile* toxin A in the rat ileum

Author: Manthy Christopher R; Pappas Theodore N; Lapp Julie A; Washington Mary K; Neville Laurie M; Ghilardi Joseph R; Rogers Scott D; Manthy Patrick W; Vigna Steven R (Reprint)

Author Address: Dep. Cell Biol., Box 3709, Duke Univ. Med. Cent., Durham, NC 27710, USA\*\* USA

Journal: Gastroenterology 111 ( 5 ): p 1272-1280 1996 1996

ISSN: 0016-5085

Document Type: Article

clostrdifficile.txt

Record Type: Abstract

Language: English

Substance P activation of enteric neurons in response to intraluminal Clostridium difficile toxin A in the rat ileum

Abstract: ...substance P receptor (SPR) on enteric neurons in the rat ileum after exposure to intraluminal Clostridium difficile toxin A. Methods: After intraluminal injection of toxin A in ileal loops, tissue was examined for pathological... ...for SPR activation by immunocytochemical analysis of SP-induced SPR endocytosis. Results: After toxin A administration, gt 70% of enteric neurons showed SPR endocytosis and became swollen with thickened dendrites. In...

DESCRIPTORS:

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms

Organisms: ...Clostridium difficile (Endospore-forming Gram-Positives

Common Taxonomic Terms: ...Eubacteria;

Diseases:

Miscellaneous Terms: Concept Codes: ...CLOSTRIDIUM-DIFFICILE TOXIN A;

10/3,K/27 (Item 27 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

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13519526 Biosis No.: 199699153586

Nitric oxide inhibits rat intestinal secretion by Clostridium difficile Toxin A but not Vibrio cholerae enterotoxin

Author: Qiu Bosheng; Pothoulakis Charalabos; Nikulasson Ignazio Castagliuolo Zigfus ; Lamont J Thomas (Reprint)

Author Address: Div. Gastroenterol., Beth Israel Hosp., 330 Brookline Ave., Boston, MA 02115, USA\*\*USA

Journal: Gastroenterology 111 ( 2 ): p 409-418 1996 1996

ISSN: 0016-5085

Document Type: Article

Record Type: Abstract

Language: English

Nitric oxide inhibits rat intestinal secretion by Clostridium difficile Toxin A but not Vibrio cholerae enterotoxin

Abstract: ...to test the effects of NO blockers and donors on acute intestinal inflammation induced by Clostridium difficile toxin A in rat ileum. Methods: Rats received NOS inhibitors or NO donors before measurement of toxin... ...inhibited toxin A-mediated ileal secretion and permeability when given before but not after toxin administration. Neither an NOS inhibitor nor an NO donor had any effect on cholera toxin-mediated...

DESCRIPTORS:

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms... ...Facultatively Anaerobic Gram-Negative Rods, Eubacteria, Bacteria, Microorganisms

Organisms: ...Clostridium difficile (Endospore-forming Gram-Positives

Common Taxonomic Terms: ...Eubacteria;

Diseases:

10/3,K/28 (Item 28 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

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12952533 Biosis No.: 199598420366

Effects of purified Clostridium difficile toxin A on rabbit distal colon

Author: Burakoff Robert (Reprint); Zhao Liming; Celifarco Anthony J; Rose Kristine

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*clostridium difficile.txt*

L; Donovan Virginia; Pothoulakis Charalabos; Percy William H  
Author Address: Winthrop-University Hosp., 222 Station Plaza North, Suite 429,  
Mineola, NY 11501, USA\*\*USA

Journal: Gastroenterology 109 ( 2 ): p 348-354 1995 1995

ISSN: 0016-5085

Document Type: Article

Record Type: Abstract

Language: English

Effects of purified *Clostridium difficile* toxin A on rabbit distal colon

**Abstract:** Background and Aims: Antibiotic-associated pseudomembranous colitis in humans is caused by proliferation of *Clostridium difficile*, which elaborates an enterotoxin toxin A that causes epithelial damage and altered motility in rabbit...: ...2 and leukotrienes B-4 and C-4/D-4/E-4. Seven hours after administration of toxin A, mediator levels and myoelectric activity remained increased but significant mucosal damage was...

**DESCRIPTORS:**

Biosystematic Names: ...Chlamydiales, Rickettsias and Chlamydias, Eubacteria, Bacteria, Microorganisms... ...Eubacteria, Bacteria, Microorganisms

Organisms: ...*Clostridium difficile* (Endospore-forming Gram-Positives

Common Taxonomic Terms: ...Eubacteria;

Diseases:

10/3,K/29 (Item 29 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

Biosis Previews(R)

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12120499 Biosis No.: 199497141784

CP-96,345, a substance P antagonist, inhibits rats intestinal responses to *Clostridium difficile* toxin A but not cholera toxin

Author: Pothoulakis Charalabos (Reprint); Castagliuolo Ignazio; Lamont J Thomas; Jaffer Amir; O'Keane J Connor; Snider R Michael; Leeman Susan E

Author Address: Univ. Hosp., Boston Univ. Med. Cent., Sect. Gastroenterol., 88 East Newton St., Boston, MA 02118, USA\*\*USA

Journal: Proceedings of the National Academy of Sciences of the United States of America 91 ( 3 ): p 947-951 1994 1994

ISSN: 0027-8424

Document Type: Article

Record Type: Abstract

Language: English

CP-96,345, a substance P antagonist, inhibits rats intestinal responses to *Clostridium difficile* toxin A but not cholera toxin

**Abstract:** Toxin A from *Clostridium difficile* mediates acute inflammatory enterocolitis in experimental while cholera toxin causes noninflammatory secretory diarrhea. The purpose... ...pretreatment with CP-96,345 had no inhibitory effect on the intestinal effects caused by administration of cholera toxin into the ileal loops. From these data, we conclude that the peptide...

**DESCRIPTORS:**

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms

Organisms: ...*Clostridium difficile* (Endospore-forming Gram-Positives

Common Taxonomic Terms: ...Eubacteria;

Diseases:

10/3,K/30 (Item 30 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

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clostrdifficile.txt

11951263 Biosis No.: 199396115679

Ketotifen inhibits Clostridium difficile toxin A-induced enteritis in rat ileum

Author: Pothoulakis Charalabos (Reprint); Karmeli Fanny; Kelly Ciaran P; Eliakim Rami; Joshi Manher A; O'Keane Connor J; Castagliuolo Ignazio; Lamont J Thomas; Rachmilewitz Daniel

Author Address: Univ. Hosp., Boston Univ. Med. Cent., Sect. Gastroenterol., 88 East Newton St., Boston, MA 02118, USA\*\*USA

Journal: Gastroenterology 105 ( 3 ): p 701-707 1993

ISSN: 0016-5085

Document Type: Article

Record Type: Abstract

Language: English

Abstract: Background: Clostridium difficile toxin A is the principal mediator of inflammatory enterocolitis in experimental animals. The purpose of this study...  
...inflammatory drug, on toxin A-induced enterotoxicity in rat ileum. Methods: The effects of intragastric administration of ketotifen on secretion, mannitol permeability, histological damage, and mucosal levels of leukotriene B-4...

10/3,K/31 (Item 31 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

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11888218 Biosis No.: 199396052634

Detection of Clostridium difficile toxins in stools: Comparison between a new enzyme immunoassay for toxin A and other routine tests

Author: Depitre Catherine; Avesani Veronique; Delmee Michel; Corthier Gerard (Reprint)

Author Address: Unite d'Ecol. Physiol. Syst. Digest., Equipe "Fonctions des Bacteries Intestinales", Cent. Rech. Jouy, F-78352 Jouy-en-Josas, France\*\*France

Journal: Gastroenterologie Clinique et Biologique 17 ( 4 ): p 283-286 1993

ISSN: 0399-8320

Document Type: Article

Record Type: Abstract

Language: English

Detection of Clostridium difficile toxins in stools: Comparison between a new enzyme immunoassay for toxin A and other routine ...

Abstract: An enzyme-linked immunosorbent assay (ELISA) for detection of Clostridium difficile toxin A (enterotoxin) using a monoclonal antibody is described. No cross-reaction was observed with any of the Clostridium species tested except for toxigenic Clostridium difficile. One hundred and eight stool specimens from hospitalized patients harbouring C. difficile in their intestine...

DESCRIPTORS:

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms

Organisms: Saccharomyces boulardii (Ascomycetes... ...Clostridium difficile associated (Endospore-forming Gram-Positives

Common Taxonomic Terms: ...Eubacteria;

Diseases:

Miscellaneous Terms: Concept Codes: ...ORAL ADMINISTRATION;

10/3,K/32 (Item 32 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

Biosis Previews(R)

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09701305 Biosis No.: 198988016420

EFFECT OF PURIFIED CLOSTRIDIUM-DIFFICILE TOXINS ON INTESTINAL SMOOTH MUSCLE II.  
TOXIN B

clostridiumdifficile.txt

Author: GILBERT R J (Reprint); POTHOUAKIS C; LAMONT J T  
Author Address: SECT OF GASTROENTEROL, EVANS MEMORIAL DEP OF CLIN RES, UNIV HOSP, BOSTON, MASS 02118, USA\*\*USA

Journal: American Journal of Physiology 256 ( 4 PART 1 ): p G767-G772 1989

ISSN: 0002-9513

Document Type: Article

Record Type: Abstract

Language: ENGLISH

EFFECT OF PURIFIED CLOSTRIDIUM-DIFFICILE TOXINS ON INTESTINAL SMOOTH MUSCLE II. TOXIN B

Abstract: ...J. Physiol. 256 (Gastrointest. Liver Physiol. 19): G759-G766, 1989] we showed that highly purified *Clostridium difficile* toxin A had a profound effect on intestinal smooth muscle after *in vivo* but not *in vitro*....the complete dose range. The electromechanical effects of toxin B were not affected by prior administration of tetrodotoxin, atropine, hexamethonium, or phentolamine. In contrast, toxin B administered *in vivo* into an isolated ileal loop had no effect on spontaneous electromechanical properties of...

DESCRIPTORS:

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms

Organisms:

Common Taxonomic Terms: ...Eubacteria;

Diseases:

10/3,K/33 (Item 33 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

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09701304 Biosis No.: 198988016419

EFFECT OF PURIFIED CLOSTRIDIUM-DIFFICILE TOXINS ON INTESTINAL SMOOTH MUSCLE I. TOXIN A

Author: GILBERT R J (Reprint); TRIADAFILOPOULOS G; POTHOUAKIS C; GIAMPAOLO C; LAMONT J T

Author Address: UNIV HOSP, SECT OF GASTROENTEROL, 75 E NEWTON ST, BOSTON, MASS 02118, USA\*\* USA

Journal: American Journal of Physiology 256 ( 4 PART 1 ): p G759-G766 1989

ISSN: 0002-9513

Document Type: Article

Record Type: Abstract

Language: ENGLISH

EFFECT OF PURIFIED CLOSTRIDIUM-DIFFICILE TOXINS ON INTESTINAL SMOOTH MUSCLE I. TOXIN A

Abstract: In these studies we determined the effects of purified *Clostridium difficile* toxin A, an enterotoxin, on the electrophysiological and contractile properties of rabbit intestinal circular smooth muscle and... . . . measurements of intracellular membrane potential and contractility were determined in excised ileal muscle strips after administration of toxin A *in vivo* (60 .mu.g/ml) into an isolated rabbit ileal loop.... . . . increased amplitude of spontaneous and carbachol-induced phasic contractions. The electrophysiological effects of *in vivo* administration of toxin A were correlated with an inflammatory infiltrate of the lamina propria, but no... . . . effect on either spontaneous or carbachol-induced electromechanical activity. Our results indicate that *in vivo* administration of *C. difficile* toxin A into a rabbit ileal loop, but not direct *in vitro*...

DESCRIPTORS:

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms

Organisms:

Common Taxonomic Terms: ...Eubacteria;

clostridifficile.txt

Diseases:

10/3,K/34 (Item 34 from file: 5) Links  
Fulltext available through: STIC Full Text Retrieval Options  
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09220088 Biosis No.: 198886060009  
CLOSTRIDIUM-DIFFICILE TOXIN A STIMULATES INTRACELLULAR CALCIUM RELEASE AND CHEMOTACTIC RESPONSE IN HUMAN GRANULOCYTES

Author: POTHOUAKIS C (Reprint); SULLIVAN R; MELNICK D A; TRIADAFILOPOULOS G;  
GADENNE A-S; MESHULAM T; LAMONT J T  
Author Address: UNIV HOSP, 75 E NEWTON ST, BOSTON, MASS 02118, USA\*\*USA  
Journal: Journal of Clinical Investigation 81 ( 6 ): p 1741-1745 1988  
ISSN: 0021-9738  
Document Type: Article  
Record Type: Abstract  
Language: ENGLISH  
CLOSTRIDIUM-DIFFICILE TOXIN A STIMULATES INTRACELLULAR CALCIUM RELEASE AND CHEMOTACTIC RESPONSE IN HUMAN GRANULOCYTES

Abstract: Clostridium difficile, a common enteric pathogen, mediates tissue damage and intestinal fluid secretion by release of two.... in cytosolic  $[Ca^{2+}]_i$ , a measured by quin 2 fluorescence. Pertussis toxin and depletion of intra- and extracellular calcium blocked the toxin A effect on cytosolic  $[Ca^{2+}]_i$ . These findings suggest...

DESCRIPTORS:

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms

Organisms:

Common Taxonomic Terms: ...Eubacteria;

Diseases:

10/3,K/35 (Item 35 from file: 5) Links  
Fulltext available through: STIC Full Text Retrieval Options  
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06481330 Biosis No.: 198223055265  
RAPID DEATH OF INFANT RHESUS MONKEYS AFTER INTRA PERITONEAL INJECTION OF CLOSTRIDIUM-DIFFICILE TOXIN A AND TOXIN B PHYSIOLOGICAL AND PATHOLOGICAL BASIS

Author: ARNON S (Reprint); MILLS D; DAY P; HENRICKSON R; SULLIVAN N; WILKINS D  
Author Address: CALIF DEP HEALTH SERV, BERKELEY, CA, USA\*\*USA  
Journal: Abstracts of the Annual Meeting of the American Society for Microbiology 82 p ABSTRACT B121 1982  
Conference/Meeting: 82ND ANNUAL MEETING OF THE AMERICAN SOCIETY FOR MICROBIOLOGY, ATLANTA, GA., USA, MARCH 7-12, 1982. ABSTR ANNU MEET AM SOC MICROBIOL.  
ISSN: 0094-8519  
Document Type: Meeting  
Record Type: Citation  
Language: ENGLISH  
RAPID DEATH OF INFANT RHESUS MONKEYS AFTER INTRA PERITONEAL INJECTION OF CLOSTRIDIUM-DIFFICILE TOXIN A AND TOXIN B PHYSIOLOGICAL AND PATHOLOGICAL BASIS

DESCRIPTORS:

Biosystematic Names: ...Eubacteria, Bacteria, Microorganisms

Organisms:

Common Taxonomic Terms: ...Eubacteria;

Diseases:

clostridifficile.txt

10/3,K/36 (Item 1 from file: 34) Links

Fulltext available through: STIC Full Text Retrieval Options

SciSearch(R) Cited Ref Sci

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04323483 Genuine Article#: RV536 No. References: 37

LONG-TERM INGESTION OF LACTOSUCROSE INCREASES BIFIDOBACTERIUM SP IN HUMAN FECAL FLORA

Author: OHKUSA T; OZAKI Y; SATO C; MIKUNI K; IKEDA H

Corporate Source: TOKYO MED & DENT UNIV,SCH MED,DEPT INTERNAL MED1,BUNKYO KU,YUSHIMA 1-5/TOKYO 113//JAPAN/

Journal: DIGESTION , 1995 , v 56 , n5 ( SEP-OCT ) , p 415-420

ISSN: 0012-2823

Language: ENGLISH Document Type: ARTICLE ( Abstract Available )

LONG-TERM INGESTION OF LACTOSUCROSE INCREASES BIFIDOBACTERIUM SP IN HUMAN FECAL FLORA

Abstract: ...8 weeks. Fecal microflora, bacterial metabolites, pH, and moisture were analyzed before and after the administration of lactosucrose. The results showed that the number and percentage of *Bifidobacterium* sp. in relation to the total bacteria significantly increased during the period of lactosucrose administration. Although fecal putrefactive products, fatty acids, pH, moisture content, and stool volume did not show ... test period, the amount of fecal phenol showed a negative correlation with the number of *Bifidobacterium* sp. Fecal ammonia significantly decreased after 4 and 8 weeks of lactosucrose administration, and 1 week after the end of lactosucrose administration, compared with results after a 1-week administration of lactosucrose. When the administration was stopped, the percentage of *Bifidobacterium* sp. in relation to the total count gradually decreased to the same level as before the administration of lactosucrose. These results suggest that under physiological conditions, lactosucrose acts on the intestinal microflora as a growth factor of *Bifidobacterium* sp.

Identifiers--

Research Fronts: 93-2333 003 (FECAL FLORA; TRANSGALACTOSYLATED OLIGOSACCHARIDES; CECAL MUCOSA)

93-1901 001 (CLOSTRIDIUM-DIFFICILE TOXIN-A; ACUTE DIARRHEA; MCCOY CELL ASSAY)

93-4511 001 (INTESTINAL MICROFLORA; BACTERIAL FECAL FLORA; PIG MODEL...)

Cited References:

10/3,K/37 (Item 2 from file: 34) Links

Fulltext available through: STIC Full Text Retrieval Options

SciSearch(R) Cited Ref Sci

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04177186 Genuine Article#: RK979 No. References: 7

ORAL-ADMINISTRATION OF VANCOMYCIN IN PREVENTING POSTOPERATIVE METHICILLIN-RESISTANT STAPHYLOCOCCUS-AUREUS ENTEROCOLITIS

Author: SHIMADA M; SAITO A; KANO T

Corporate Source: KYUSHU UNIV,FAC MED,DEPT SURG 2,HIGASHI KU,3-1-1 MAIDASHI/FUKUOKA 812//JAPAN/; NATL FUKUOKA HIGASHI HOSP,DEPT SURG/KASUGA/FUKUOKA/JAPAN/

Journal: CLINICAL DRUG INVESTIGATION , 1995 , v 10 , n1 ( JUL ) , p 12-16

ISSN: 1173-2563

Language: ENGLISH Document Type: ARTICLE ( Abstract Available )

ORAL-ADMINISTRATION OF VANCOMYCIN IN PREVENTING POSTOPERATIVE METHICILLIN-RESISTANT STAPHYLOCOCCUS-AUREUS ENTEROCOLITIS

Abstract: ...and a vancomycin (VCM) group (n = 41), in which vancomycin 1.5 g/day was administered orally from preoperative day 1 to postoperative day 2. In the control group, 11 patients... in the VCM group (p<0.05 by Fisher's exact probability test), nor any *Clostridium difficile*-induced enterocolitis. No adverse effects related to VCM administration were seen. The short term perioperative oral administration of VCM is thus considered to be useful in preventing MRSA enterocolitis after surgery involving... borne in mind that this regimen has the

clostrdifficile.txt

potential risk for development of VCM-resistant enterococci.

Identifiers--

Research Fronts: 93-1901 001 (CLOSTRIDIUM-DIFFICILE TOXIN-A; ACUTE DIARRHEA; MCCOY CELL ASSAY)

Cited References:

10/3,K/38 (Item 3 from file: 34) Links  
Fulltext available through: STIC Full Text Retrieval Options  
SciSearch(R) Cited Ref Sci  
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03505854 Genuine Article#: PH669 No. References: 51  
CLOSTRIDIUM DIFFICILE-COLITIS - EPIDEMIOLOGY, PATHOPHYSIOLOGY, AND TREATMENT

Author: Mitty RD; Lamont JT  
Corporate Source: BOSTON UNIV, MED CTR, GASTROENTEROL SECT, 88 E NEWTON ST, EVANS 201/BOSTON//MA/02215; BOSTON UNIV, MED CTR, GASTROENTEROL SECT, 88 E NEWTON ST, EVANS 201/BOSTON//MA/02215; BOSTON UNIV, SCH MED/BOSTON//MA/02118  
Journal: MOUNT SINAI JOURNAL OF MEDICINE , 1994 , v 61 , n4 ( SEP ) , p 329-335  
ISSN: 0027-2507  
Language: ENGLISH Document Type: ARTICLE  
CLOSTRIDIUM DIFFICILE-COLITIS - EPIDEMIOLOGY, PATHOPHYSIOLOGY, AND TREATMENT

Identifiers-- ...ANTIBIOTIC-ASSOCIATED COLITIS; PSEUDOMEMBRANOUS COLITIS; TOXIN-A; SACCHAROMYCES-BOULARDII; RABBIT ILEUM; HOSPITAL ENVIRONMENT; VANCOMYCIN THERAPY; ORAL VANCOMYCIN; DIARRHEA; METRONIDAZOLE  
Research Fronts: 92-1932 003 (CLOSTRIDIUM-DIFFICILE TOXIN-A; ANTIBIOTIC-ASSOCIATED FULMINANT PSEUDOMEMBRANOUS COLITIS; ACUTE INFECTIVE DIARRHEA)  
92-4567 001 (INFLAMMATORY BOWEL-DISEASE; ORAL 4-AMINOSALICYLIC ACID THERAPY IN ULCERATIVE-COLITIS; FERRET MODEL OF ACUTE MULTIFOCAL GASTROINTESTINAL INFARCTION)

10/3,K/39 (Item 4 from file: 34) Links  
Fulltext available through: STIC Full Text Retrieval Options  
SciSearch(R) Cited Ref Sci  
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03358784 Genuine Article#: NZ047 No. References: 133  
UPDATE ON CLOSTRIDIUM DIFFICILE-INDUCED COLITIS .1.

Author: REINKE CM; MESSICK CR  
Corporate Source: AUBURN UNIV, SCH PHARM, DEPT CLIN PHARM PRACTICE, 308 PHARM BLDG/AUBURN//AL/36849; E ALABAMA MED CTR/OPELIKA//AL/00000; UNIV N CAROLINA HOSP/CHAPEL HILL//NC/00000  
Journal: AMERICAN JOURNAL OF HOSPITAL PHARMACY , 1994 , v 51 , n14 ( JUL 15 ) , p 1771-1781  
ISSN: 0002-9289  
Language: ENGLISH Document Type: REVIEW ( Abstract Available )  
UPDATE ON CLOSTRIDIUM DIFFICILE-INDUCED COLITIS .1.

Abstract: Recent findings on the epidemiology, pathogenesis, clinical manifestations, diagnosis, and treatment of Clostridium difficile-induced colitis (CDIC) are discussed.

CDIC is a gastrointestinal disorder that results from colonization by and overgrowth of *C. difficile*. Among patients in the community who are treated with an oral antimicrobial, only 1 to 3 individuals per 100,000 develop CDIC, compared with as many... a period of watchful waiting may be advisable in mild cases. When treatment is necessary, oral metronidazole is the agent of choice in all but the most severe cases. Whether oral metronidazole is therapeutically equivalent to oral vancomycin in severe CDIC is controversial. Regardless of the antimicrobial used, some patients suffer a ... of treatment for relapsing CDIC. Of the investigational treatments, the tiacumycin macrolides and the yeast *Saccharomyces boulardii* appear most promising. Diagnostic assays based on the polymerase chain

clostridifficile.txt

reaction should allow more...

Identifiers--

Research Fronts: 92-1932 003 (CLOSTRIDIUM-DIFFICILE TOXIN-A; ANTIBIOTIC-ASSOCIATED FULMINANT PSEUDOMEMBRANOUS COLITIS; ACUTE INFECTIVE DIARRHEA)  
92-0825 001 (INVITRO ACTIVITY OF TEMAFLOXACIN...)

Cited References:

10/3,K/40 (Item 5 from file: 34) Links

Fulltext available through: STIC Full Text Retrieval Options  
SciSearch(R) Cited Ref Sci

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03256424 Genuine Article#: NR598 No. References: 36

RANDOMIZED PLACEBO-CONTROLLED TRIAL OF SACCHAROMYCES-BOULARDII IN COMBINATION WITH STANDARD ANTIBIOTICS FOR CLOSTRIDIUM- DIFFICILE DISEASE

Author: MCFARLAND LV; SURAWICZ CM; GREENBERG RN; FEKETY R; ELMER GW; MOYER KA; MELCHER SA; BOWEN KE; COX JL; NOORANI Z; HARRINGTON G; RUBIN M; GREENWALD D  
Corporate Source: UNIV WASHINGTON,SCH PHARM,DEPT MED CHEM,BG-20/SEATTLE//WA/98195; UNIV WASHINGTON,SCH MED,DEPT MED,DIV GASTROENTEROL/SEATTLE//WA/98195; BIOCODEX INC/SEATTLE//WA/00000; UNIV KENTUCKY,DEPT MED,DIV INFECT DIS/LEXINGTON//KY/40506; VET AFFAIRS MED CTR/LEXINGTON//KY/00000; UNIV MICHIGAN,DEPT INTERNAL MED,DIV INFECT DIS/ANN ARBOR//MI/48109; COLUMBIA UNIV,COLL PHYS & SURG,DEPT MED/NEW YORK//NY/00000  
Journal: JAMA-JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION , 1994 , V 271 , N24 ( JUN 22 ) , P 1913-1918

ISSN: 0098-7484

Language: ENGLISH Document Type: ARTICLE ( Abstract Available )

RANDOMIZED PLACEBO-CONTROLLED TRIAL OF SACCHAROMYCES-BOULARDII IN COMBINATION WITH STANDARD ANTIBIOTICS FOR CLOSTRIDIUM- DIFFICILE DISEASE

Abstract: Objective.-To determine the safety and efficacy of a new combination treatment for patients with Clostridium difficile-associated disease (CDD). The treatment combines the yeast *Saccharomyces boulardii* with an antibiotic (vancomycin hydrochloride or metronidazole).

Design.-A double-blind, randomized, placebo-controlled... ...acquired immunodeficiency syndrome or cancer chemotherapy within 3 months were not eligible.

Intervention.-Treatment with oral *S boulardii* (1 g/d for 4 weeks) or placebo in combination with a standard...

Identifiers-- ...VANCOMYCIN THERAPY; PSEUDOMEMBRANOUS COLITIS; HOSPITALIZED-PATIENTS; BIOTHERAPEUTIC AGENT; ORAL VANCOMYCIN; RISK-FACTORS; DIARRHEA; RELAPSE; INFECTION; TOXIN

Research Fronts: 92-1932 002 (CLOSTRIDIUM-DIFFICILE TOXIN-A; ANTIBIOTIC-ASSOCIATED FULMINANT PSEUDOMEMBRANOUS COLITIS; ACUTE INFECTIVE DIARRHEA)

Cited References:

10/3,K/41 (Item 6 from file: 34) Links

Fulltext available through: STIC Full Text Retrieval Options  
SciSearch(R) Cited Ref Sci

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02800763 Genuine Article#: ME603 No. References: 14

RECOVERY AND ELIMINATION OF THE BIOTHERAPEUTIC AGENT, SACCHAROMYCES -BOULARDII, IN HEALTHY-HUMAN VOLUNTEERS

Author: KLEIN SM; ELMER GW; MCFARLAND LV; SURAWICZ CM; LEVY RH

Corporate Source: UNIV WASHINGTON,DEPT MED CHEM,BG-20/SEATTLE//WA/98195; UNIV WASHINGTON,DEPT MED CHEM,BG-20/SEATTLE//WA/98195; UNIV WASHINGTON,HARBORVIEW MED CTR,DEPT MED/SEATTLE//WA/98104; UNIV WASHINGTON,DEPT PHARMACEUT/SEATTLE//WA/98195  
Journal: PHARMACEUTICAL RESEARCH , 1993 , V 10 , N11 ( NOV ) , P 1615-1619

ISSN: 0724-8741

Language: ENGLISH Document Type: ARTICLE ( Abstract Available )

*clostridifficile.txt*

RECOVERY AND ELIMINATION OF THE BIOTHERAPEUTIC AGENT, SACCHAROMYCES -BOULARDII, IN  
HEALTHY-HUMAN VOLUNTEERS

**Abstract:** Saccharomyces boulardii (Sb) is a nonpathogenic yeast used to treat  
intestinal illnesses such as pseudomembranous colitis... Sb increased  
significantly. The percentage recovery was dose independent. When a single Sb dose  
was administered 24 hr after beginning a course of ampicillin, there was a  
significant increase (P < 0...).

**Identifiers--** ...CLOSTRIDIUM-DIFFICILE COLITIS; PREVENTION; KINETICS; CEREVISIAE;  
DIARRHEA; STRAIN; YEAST; GG

**Research Fronts:** 91-1233 001 (CLOSTRIDIUM-DIFFICILE TOXIN-A; ANTIBIOTIC-ASSOCIATED  
DIARRHEA; NORMAL INTESTINAL MICROFLORA)

**Cited References:**

10/3,K/42 (Item 7 from file: 34) Links

Fulltext available through: STIC Full Text Retrieval Options

SciSearch(R) Cited Ref Sci

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02788552 Genuine Article#: MC890 No. References: 15

INHIBITION OF CANDIDA-ALBICANS TRANSLOCATION FROM THE GASTROINTESTINAL-TRACT OF MICE  
BY ORAL-ADMINISTRATION OF SACCHAROMYCES-BOULARDII

**Author:** BERG R; BERNASCONI P; FOWLER D; GAUTREAUX M

**Corporate Source:** LOUISIANA STATE UNIV, MED CTR, DEPT MICROBIOL & IMMUNOL, 1501 KINGS  
HIGHWAY/NEW ORLEANS//LA/70112; LABS BIOCODEX/MONTROUGE//FRANCE/

**Journal:** JOURNAL OF INFECTIOUS DISEASES , 1993 , V 168 , N5 ( NOV ) , P 1314-1318

**ISSN:** 0022-1899

**Language:** ENGLISH Document Type: NOTE ( Abstract Available )

INHIBITION OF CANDIDA-ALBICANS TRANSLOCATION FROM THE GASTROINTESTINAL-TRACT OF MICE  
BY ORAL-ADMINISTRATION OF SACCHAROMYCES-BOULARDII

**Abstract:** ...as the mesenteric lymph node (MLN), spleen, liver, kidneys, and blood.  
The ability of orally administered viable Saccharomyces boulardii to inhibit Candida  
albicans translocation from the GI tract was tested in antibiotic-decontaminated...  
...orally challenged with C albicans to promote intestinal overgrowth and subsequent  
translocation of this organism. Oral S. boulardii treatment reduced the incidence of  
MLN cultures positive for C albicans but did... albicans to spread systemically  
to the spleen, liver, and kidneys. In these immunosuppressed mice, orally  
administered S. boulardii decreased both the incidence of C. albicans translocation  
to the MLN, liver, and...

**Identifiers--**

**Research Fronts:** ...TRANSLOCATION; GLUTAMINE-METABOLISM IN SEPTIC RATS; INCREASED  
GUT PERMEABILITY FOLLOWING BURN TRAUMA)

91-1233 001 ( CLOSTRIDIUM-DIFFICILE TOXIN-A; ANTIBIOTIC-ASSOCIATED DIARRHEA; NORMAL  
INTESTINAL MICROFLORA)

**Cited References:**

10/3,K/43 (Item 8 from file: 34) Links

Fulltext available through: STIC Full Text Retrieval Options

SciSearch(R) Cited Ref Sci

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02741625 Genuine Article#: LZ763 No. References: 9

IMPACT OF CEFPODOXIME PROXETIL AND AMOXICILLIN ON THE NORMAL ORAL AND INTESTINAL  
MICROFLORA

**Author:** BRISMAR B; EDLUND C; NORD CE

**Corporate Source:** KAROLINSKA INST, HUDDINGE UNIV HOSP, DEPT MICROBIOL/S-14186

HUDDINGE//SWEDEN/ ; KAROLINSKA INST, HUDDINGE UNIV HOSP, DEPT MICROBIOL/S-14186

HUDDINGE//SWEDEN/; KAROLINSKA INST, HUDDINGE UNIV HOSP, DEPT SURG/S-14186

HUDDINGE//SWEDEN/; NATL BACTERIOL LAB/S-10521 STOCKHOLM//SWEDEN/

**Journal:** EUROPEAN JOURNAL OF CLINICAL MICROBIOLOGY & INFECTIOUS DISEASES , 1993 , V

clostridifficile.txt

12 , N9 ( SEP ) , P 714-719

ISSN: 0934-9723

Language: ENGLISH Document Type: NOTE ( Abstract Available )

IMPACT OF CEFPODOXIME PROXETIL AND AMOXICILLIN ON THE NORMAL ORAL AND INTESTINAL MICROFLORA

Abstract: ...tablets every 8 h for seven days and the impact of the agents on the oral and intestinal microflora was studied. In the oral microflora, only minor alterations were observed in both groups. In subjects receiving cefpodoxime proxetil, the... ...and clostridia were strongly reduced in the faecal flora, while there was an overgrowth of enterococci, yeasts and Clostridium difficile.

Amoxicillin administration induced somewhat smaller alterations in the faecal microflora, although all subjects had overgrowth of new...

Identifiers--

Research Fronts: 91-1233 001 (CLOSTRIDIUM-DIFFICILE TOXIN-A; ANTIBIOTIC-ASSOCIATED DIARRHEA; NORMAL INTESTINAL MICROFLORA)

Cited References:

10/3,K/44 (Item 9 from file: 34) Links

Fulltext available through: STIC Full Text Retrieval Options

SciSearch(R) Cited Ref Sci

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02694504 Genuine Article#: LW823 No. References: 129

NONANTIBIOTIC THERAPY AND PHARMACOTHERAPY OF ACUTE INFECTIOUS DIARRHEA

Author: POWELL DW; SZAUTER KE

Corporate Source: UNIV TEXAS,MED BRANCH,DEPT INTERNAL MED,Y108 JOHN SEALY HOSP,E-67/GALVESTON//TX/77550

Journal: GASTROENTEROLOGY CLINICS OF NORTH AMERICA , 1993 , V 22 , N3 ( SEP ) , P 683-707

ISSN: 0889-8553

Language: ENGLISH Document Type: REVIEW

Identifiers-- ...ACTING SOMATOSTATIN ANALOG; TOXIGENIC ESCHERICHIA-COLI; BISMUTH SUBSALICYLATE; SMALL-INTESTINE; ION-TRANSPORT; SACCHAROMYCES -BOULARDII; TRAVELERS DIARRHEA; ORAL REHYDRATION; VIBRIO-CHOLERAE; FLUID-LOSS

Research Fronts: ...1788 002 (SOMATOSTATIN ANALOG SMS 201-995; MIDGUT CARCINOID-TUMORS; OCTREOTIDE ACETATE)

91-1233 001 (CLOSTRIDIUM- DIFFICILE TOXIN-A; ANTIBIOTIC-ASSOCIATED DIARRHEA; NORMAL INTESTINAL MICROFLORA)

91-4682 001 (ENTEROTOXIGENIC ESCHERICHIA-COLI; RAPID DETECTION; COAGGLUTINATION TEST; CLOSTRIDIUM -DIFFICILE TOXIN-A; PATHOGENICITY OF VIBRIO-CHOLERAE)

10/3,K/45 (Item 10 from file: 34) Links

Fulltext available through: STIC Full Text Retrieval Options

SciSearch(R) Cited Ref Sci

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02619337 Genuine Article#: LQ665 No. References: 9

IMPACT OF CEFUROXIME-AXETIL ON THE NORMAL INTESTINAL MICROFLORA

Author: EDLUND C; BRISMAR B; SAKAMOTO H; NORD CE

Corporate Source: HUDDINGE UNIV HOSP,KAROLINSKA INST,DEPT MICROBIOL/S-14186 HUDDINGE//SWEDEN/ ; NATL BACTERIOL LAB/S-10521 STOCKHOLM//SWEDEN/; HUDDINGE UNIV HOSP,KAROLINSKA INST,DEPT SURG/S-14186 HUDDINGE//SWEDEN/

Journal: MICROBIAL ECOLOGY IN HEALTH AND DISEASE , 1993 , V 6 , N4 ( JUL-AUG ) , P 185-189

ISSN: 0891-060X

Language: ENGLISH Document Type: ARTICLE ( Abstract Available )

Abstract: ...i.d. for 10 d. Stool samples were collected before, during and after cefuroxime-axetil administration. The mean concentrations of cefuroxime in faeces on days 7 and 10 were 0.57... ...mg/kg (range <0.125-1.35 mg/kg) respectively. There was an overgrowth of enterococci and staphylococci, while the levels of bacilli and

*clostridium difficile.txt*

enterobacteria were not significantly altered during the administration period. Six subjects became colonised by *Candida albicans* and three by *Clostridium difficile* during and after the administration period. Two of the volunteers with *C. difficile* reported mild diarrhoea during the administration period. The number of bifidobacteria and clostridia decreased while the levels of eubacteria and bacteroides were unaffected by cefuroxime-axetil administration. Beta-Lactamase activities in faeces were found in six volunteers and increased significantly during the administration period ( $P<0.05$ ). There was a clear relationship between beta-lactamase activities in faeces...

Identifiers--

Research Fronts: 91-1233 001 (CLOSTRIDIUM-DIFFICILE TOXIN-A; ANTIBIOTIC-ASSOCIATED DIARRHEA; NORMAL INTESTINAL MICROFLORA)

91-1889 001 (INVITRO ACTIVITY OF CLARITHROMYCIN; ACUTE OTITIS...)

Cited References:

10/3,K/46 (Item 11 from file: 34) Links

Fulltext available through: STIC Full Text Retrieval Options

SciSearch(R) Cited Ref Sci

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02619334 Genuine Article#: LQ665 No. References: 78

SACCHAROMYCES-BOULARDII - A REVIEW OF AN INNOVATIVE BIOTHERAPEUTIC AGENT

Author: MCFARLAND LV; BERNASCONI P

Corporate Source: 1910 FAIRVIEW AVE E 208/SEATTLE//WA/98102; LABS

BIOCODEX/MONTROUGE//FRANCE/ ; UNIV WASHINGTON,DEPT MED CHEM/SEATTLE//WA/98195;

BIOCODEX INC/SEATTLE//WA/00000

Journal: MICROBIAL ECOLOGY IN HEALTH AND DISEASE , 1993 , v 6 , n4 ( JUL-AUG ) , p 157-171

ISSN: 0891-060X

Language: ENGLISH Document Type: REVIEW ( Abstract Available )

SACCHAROMYCES-BOULARDII - A REVIEW OF AN INNOVATIVE BIOTHERAPEUTIC AGENT

Abstract: *Saccharomyces boulardii* is a non-pathogenic yeast which has been used as both a preventive and... . . . a profile which is effective in the therapy of diarrhoea and is remarkably safe for oral ingestion. The pharmacokinetic data demonstrate that *S. boulardii* reaches a steady-state concentration quickly and... . . . quickly eliminated from the colon. Clinical trials studying antibiotic-associated diarrhoea, nasogastric-tube alimentation diarrhoea, *Clostridium difficile*-disease, acute diarrhoea and chronic diarrhoea in HIV-infected patients are reviewed.

Identifiers-- ...CLOSTRIDIUM-DIFFICILE COLITIS; ANTIBIOTIC-ASSOCIATED DIARRHEA; CLINDAMYCIN-ASSOCIATED COLITIS; INDUCED MORTALITY; GNTOBIOTIC MICE; LACTOBACILLUS GG; DIGESTIVE-TRACT; CHOLERA-TOXIN; DOUBLE-BLIND; ILL PATIENTS

Research Fronts: 91-1233 004 (CLOSTRIDIUM-DIFFICILE TOXIN-A; ANTIBIOTIC-ASSOCIATED DIARRHEA; NORMAL INTESTINAL MICROFLORA)

Cited References:

10/3,K/47 (Item 12 from file: 34) Links

Fulltext available through: STIC Full Text Retrieval Options

SciSearch(R) Cited Ref Sci

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02487317 Genuine Article#: LE919 No. References: 69

LACTOBACILLI AND THE NORMAL HUMAN ANAEROBIC MICROFLORA

Author: LIDBECK A; NORD CE

Corporate Source: KAROLINSKA INST, HUDDINGE UNIV HOSP, DEPT MICROBIOL, F88/S-14186 HUDDINGE//SWEDEN/; KAROLINSKA INST, HUDDINGE UNIV HOSP, DEPT MICROBIOL, F88/S-14186 HUDDINGE//SWEDEN/; NATL BACTERIOL LAB/S-10521 STOCKHOLM//SWEDEN/

Journal: CLINICAL INFECTIOUS DISEASES , 1993 , v 16 , s4 ( JUN ) , p S181-S187

ISSN: 1058-4838

Language: ENGLISH Document Type: ARTICLE ( Abstract Available )

LACTOBACILLI AND THE NORMAL HUMAN ANAEROBIC MICROFLORA

clostridifficile.txt

Abstract: ...to the host with regard to many metabolic functions and in resistance to bacterial infections. Administration of antimicrobial agents may disrupt the normal microflora, leading to a decrease in colonization resistance...  
...Antimicrobial therapy may also be accompanied by gastrointestinal disturbances and a reduction or elimination of lactobacilli in the intestinal microflora.  
Lactobacilli are part of the normal gram-positive anaerobic microflora. Through the production of lactic acid... ...contribute to the maintenance of colonization resistance. Several studies have indicated a protective effect of lactobacilli against potential pathogens in the gastrointestinal tract. In view of these beneficial properties, it is considered important to maintain or increase the levels of lactobacilli in the intestinal microflora.

Identifiers--

Research Fronts: 91-1233 001 (CLOSTRIDIUM-DIFFICILE TOXIN-A; ANTIBIOTIC-ASSOCIATED DIARRHEA; NORMAL INTESTINAL MICROFLORA)

91-1773 001 (BACTERIOCIN INHIBITION OF CLOSTRIDIUM-BOTULINUM SPORES...)

Cited References:

10/3,K/48 (Item 13 from file: 34) Links

Fulltext available through: STIC Full Text Retrieval Options

SciSearch(R) Cited Ref Sci

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02433999 Genuine Article#: LB022 No. References: 32

SACCHAROMYCES-BOULARDII FOR CLOSTRIDIUM-DIFFICILE -ASSOCIATED ENTEROPATHIES IN INFANTS

Author: BUTS JP; CORTHIER G; DELMEE M

Corporate Source: UNIV CATHOLIQUE LOUVAIN, CLIN ST LUC, DEPT PEDIAT, PAEDIAT GASTROENTEROL LAB, AVE HIPPOCRATE 10/B-1200 BRUSSELS//BELGIUM//; UNIV CATHOLIQUE LOUVAIN, MICROBIOL LAB/B-1200 BRUSSELS//BELGIUM//; INRA, INTESTINAL BACTERIAL FUNCT LAB/F-78350 JOUY EN JOSAS//FRANCE//

Journal: JOURNAL OF PEDIATRIC GASTROENTEROLOGY AND NUTRITION , 1993 , v 16 , n4 (MAY ) , p 419-425

ISSN: 0277-2116

Language: ENGLISH Document Type: ARTICLE (Abstract Available)

SACCHAROMYCES-BOULARDII FOR CLOSTRIDIUM-DIFFICILE -ASSOCIATED ENTEROPATHIES IN INFANTS

Abstract: Based on experimental evidence in animals showing that the oral administration of *Saccharomyces boulardii* is effective in reducing morbidity and mortality due to *Clostridium difficile*-induced pseudomembranous colitis, we conducted an open trial to examine the effects of the living... ...strains of *C. difficile* may cause chronic enteropathies without colitis that may be improved by oral administration of *S. boulardii*.

Identifiers--

Research Fronts: 91-1233 005 (CLOSTRIDIUM-DIFFICILE TOXIN-A; ANTIBIOTIC-ASSOCIATED DIARRHEA; NORMAL INTESTINAL MICROFLORA)

Cited References:

10/3,K/49 (Item 14 from file: 34) Links

Fulltext available through: STIC Full Text Retrieval Options

SciSearch(R) Cited Ref Sci

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02375037 Genuine Article#: KX432 No. References: 22

EFFECT OF INTRAPARTUM CHEMOPROPHYLAXIS AND MODE OF DELIVERY ON NEONATAL GUT COLONIZATION

Author: AHTONEN P; PELTONEN R; LEHTONEN OP; KERO P; ERKKOLA R; EEROLA E

Corporate Source: UNIV TURKU, CENT HOSP, DEPT PAEDIAT/SF-20520 TURKU 52//FINLAND//; UNIV TURKU, DEPT MED MICROBIOL/SF-20520 TURKU 52//FINLAND//; UNIV TURKU, DEPT OBSTET & GYNÉCOL/SF-20520 TURKU52//FINLAND//

*clostridiffficile.txt*

Journal: MICROBIAL ECOLOGY IN HEALTH AND DISEASE , 1993 , v 6 , n2 ( MAR-APR ) , p 67-72

ISSN: 0891-060X

Language: ENGLISH Document Type: ARTICLE ( Abstract Available )

Abstract: ...In the newborns, vaginal delivery leads to increased colonisation by *Bacteroides* ( $P < 0.0001$ ) and *Lactobacillus* spp. ( $P = 0.0020$ ). Intrapartum administration of ampicillin delayed colonisation by *Lactobacillus* spp. ( $P = 0.0012$ ) after vaginal delivery. The results of this study show that even a single-dose intrapartum administration of ampicillin exposes the neonate to colonisation disturbances of *Lactobacillus* spp., just as does caesarean section.

Identifiers-- ...CLOSTRIDIUM-DIFFICILE; BACTERIAL-COLONIZATION; INFECTION; NEWBORNS; EPIDEMIOLOGY; TRANSMISSION; MICROFLORA; AMPICILLIN; INFANTS; DISEASE

Research Fronts: ...INFLUENZAE TYPE-B DISEASE; CONJUGATE VACCINES; RESPIRATORY SYNCYTIAL VIRUS; CHILDREN AT RISK)

91-1233 001 (CLOSTRIDIUM- DIFFICILE TOXIN-A; ANTIBIOTIC-ASSOCIATED DIARRHEA; NORMAL INTESTINAL MICROFLORA)

Cited References:

10/3,K/50 (Item 15 from file: 34) Links

Fulltext available through: STIC Full Text Retrieval Options

SciSearch(R) Cited Ref Sci

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02153296 Genuine Article#: KF249 No. References: 39

ADMINISTRATION OF DIFFERENT LACTOBACILLUS STRAINS IN FERMENTED OATMEAL SOUP - INVIVO COLONIZATION OF HUMAN INTESTINAL-MUCOSA AND EFFECT ON THE INDIGENOUS FLORA

Author: JOHANSSON ML; MOLIN G; JEPSSON B; NOBAEK S; AHRNE S; BENGMARK S

Corporate Source: UNIV LUND,DEPT FOOD TECHNOL,FOOD HYG LAB,POB 124/S-22100

LUND//SWEDEN//; UNIV LUND,DEPT FOOD TECHNOL,FOOD HYG LAB,POB 124/S-22100

LUND//SWEDEN//; UNIV LUND,DEPT SURG/S-22185 LUND//SWEDEN//

Journal: APPLIED AND ENVIRONMENTAL MICROBIOLOGY , 1993 , v 59 , n1 ( JAN ) , p 15-20

ISSN: 0099-2240

Language: ENGLISH Document Type: ARTICLE ( Abstract Available )

ADMINISTRATION OF DIFFERENT LACTOBACILLUS STRAINS IN FERMENTED OATMEAL SOUP - INVIVO COLONIZATION OF HUMAN INTESTINAL-MUCOSA AND EFFECT ON THE...

Abstract: In vivo colonization by different *Lactobacillus* strains on human intestinal mucosa of healthy volunteers was studied together with the effect of *Lactobacillus* administration on different groups of indigenous bacteria. A total of 19 test strains were administered in fermented oatmeal soup containing  $5 \times 10^6$  CFU of each strain per ml.... days. Biopsies were taken from both the upper jejunum and the rectum 1 day before administration was started and 1 and 11 days after administration was terminated. The administration significantly increased the *Lactobacillus* counts on the jejunum mucosa, and high levels remained 11 days after administration was terminated. The levels of streptococci increased by 10- to 100-fold in two persons.... jejunum decreased by 10- to 100-fold in three of the volunteers 1 day after administration was terminated. In recta, the anaerobic bacterium counts and the gram-negative anaerobic bacterium counts decreased significantly by the end of administration. Furthermore, a decrease in the number of members of the Enterobacteriaceae by 1,000-fold was observed on the rectal mucosa of two persons. Randomly picked *Lactobacillus* isolates were identified phenotypically by API 50CH tests and genotypically by the plasmid profiles of strains and by restriction endonuclease analysis of chromosomal DNAs. The following five administered *Lactobacillus* strains were reisolated from the mucosa 1 day after the end of administration: *Lactobacillus plantarum* 299 and 299v, *Lactobacillus casei* subsp. *rhamnosus* 271, *Lactobacillus reuteri* 108, and *Lactobacillus agilis* 294. All of these strains were also found 11 days after administration was terminated, although *L. plantarum* 299 and 299v were dominant.

Identifiers-- ...DAIRY-PRODUCTS; MICROFLORA; ACIDOPHILUS; GUT; INFECTIONS; YOGURT; IMPACT

Research Fronts: ...TRANSLOCATION; GLUTAMINE-METABOLISM IN SEPTIC RATS; INCREASED

*clostridifficile.txt*

GUT PERMEABILITY FOLLOWING BURN TRAUMA)  
91-1233 002 ( CLOSTRIDIUM-DIFFICILE TOXIN-A; ANTIBIOTIC-ASSOCIATED DIARRHEA; NORMAL  
INTESTINAL MICROFLORA)  
91-2849 001 (ANAEROBIC GLYCEROL DEGRADATION; BIOCONTROL STRAINS OF...  
Cited References:

10/3,K/51 (Item 16 from file: 34) [Links](#)  
Fulltext available through: STIC Full Text Retrieval Options  
SciSearch(R) Cited Ref Sci  
(c) 2008 The Thomson Corp. All rights reserved.  
02141291 Genuine Article#: KF026 No. References: 37  
DIAGNOSIS AND TREATMENT OF CLOSTRIDIUM-DIFFICILE COLITIS  
  
Author: FEKETY R; SHAH AB  
Corporate Source: UNIV MICHIGAN HOSP,3116 TAUBMAN CTR/ANN ARBOR//MI/48109; UNIV  
MICHIGAN,MED CTR,DEPT INTERNAL MED,DIV INFECT DIS/ANN ARBOR//MI/48109; LOYOLA  
UNIV,HINES VET AFFAIRS HOSP,DIV INFECT DIS/MAYWOOD//IL/60153  
Journal: JAMA-JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION , 1993 , v 269 , n1 ( JAN  
6 ) , p 71-75  
ISSN: 0098-7484  
Language: ENGLISH Document Type: ARTICLE ( Abstract Available )  
DIAGNOSIS AND TREATMENT OF CLOSTRIDIUM-DIFFICILE COLITIS

Abstract: Pseudomembranous colitis associated with antibiotic therapy is almost  
always due to an overgrowth of *Clostridium difficile*. If untreated, pseudomembranous  
colitis can lead to severe diarrhea, hypovolemic shock, toxic dilatation of the...  
...recommended for treatment of mild illness, and vancomycin is recommended for  
treatment of severe illness. Oral therapy is always preferred because it is more  
reliable. In patients with recurrent or relapsing... either metronidazole or  
vancomycin is effective for that episode, but novel approaches, such as the oral or  
rectal introduction of competing nonpathogenic organisms, may prove to be more  
successful in prevention...

Identifiers-- ...ANTIBIOTIC-ASSOCIATED DIARRHEA; PSEUDOMEMBRANOUS COLITIS;  
SACCHAROMYCES-BOULARDII; COMPUTED-TOMOGRAPHY; TOXIN-A; VANCOMYCIN; HAMSTERS;  
DISEASE; THERAPY; TRIAL  
Research Fronts: 91-1233 004 (CLOSTRIDIUM-DIFFICILE TOXIN-A; ANTIBIOTIC-ASSOCIATED  
DIARRHEA; NORMAL INTESTINAL MICROFLORA)  
Cited References:

10/3,K/52 (Item 17 from file: 34) [Links](#)  
Fulltext available through: STIC Full Text Retrieval Options  
SciSearch(R) Cited Ref Sci  
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02111626 Genuine Article#: KB731 No. References: 24  
EFFECT OF ORAL SACCHAROMYCES-BOULARDII TREATMENT ON THE ACTIVITY OF  
CLOSTRIDIUM-DIFFICILE TOXINS IN MOUSE DIGESTIVE-TRACT

Author: CORTHIER G; LUCAS F; JOUVERT S; CASTEX F  
Corporate Source: UNITE ECOL & PHYSIOL SYST DIGESTIF/F-78352 JOUYEN JOSAS//FRANCE//;  
UNIV MONTPELLIER 1,FAC PHARM,UNITE RECH IMMUNOL/F-34060 MONTPELLIER//FRANCE/  
Journal: TOXICON , 1992 , v 30 , n12 ( DEC ) , p 1583-1589  
ISSN: 0041-0101  
Language: ENGLISH Document Type: ARTICLE ( Abstract Available )  
EFFECT OF ORAL SACCHAROMYCES-BOULARDII TREATMENT ON THE ACTIVITY OF  
CLOSTRIDIUM-DIFFICILE TOXINS IN MOUSE DIGESTIVE-TRACT

Abstract: Human antibiotic-associated diarrhoea and pseudomembranous colitis are  
partly due to toxin production by *Clostridium difficile*. It is now well documented  
that *Saccharomyces boulardii* protects against *C. difficile* induced diseases. In an  
attempt to understand better the mechanism...  
Identifiers--

*clostridiumdifficile.txt*

Research Fronts: 90-1941 003 (CLOSTRIDIUM-DIFFICILE TOXIN-A; ASSOCIATED DIARRHEA; OVERLOOKED NURSING-HOME INFECTION)  
Cited References:

10/3,K/53 (Item 18 from file: 34) Links

SciSearch(R) Cited Ref Sci

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01390944 Genuine Article#: GV254 No. References: 20

ORAL VANCOMYCIN-INDUCED RASH - CASE-REPORT AND REVIEW OF THE LITERATURE

Author: MCCULLOUGH JM; DIELMAN DG; PEERY D

Corporate Source: UNIV MICHIGAN,COLL PHARM,428 CHURCH ST/ANN ARBOR//MI/48109; UNIV MICHIGAN HOSP/ANN ARBOR//MI/48109; SALINE COMMUNITY HOSP/SALINE//MI/00000

Journal: DICP-THE ANNALS OF PHARMACOTHERAPY , 1991 , V 25 , N12 , P 1326-1328

Language: ENGLISH Document Type: REVIEW ( Abstract Available )

ORAL VANCOMYCIN-INDUCED RASH - CASE-REPORT AND REVIEW OF THE LITERATURE

Abstract: ...and pruritus are described in an 82-year-old woman with chronic renal failure following administration of oral vancomycin hydrochloride 125 mg q6h for the treatment of Clostridium difficile colitis. Renal function was estimated to be 0.27 mL/s based on a serum... ...denied any previous immunologically mediated reactions to medications. Maculopapular rash is rare secondary to vancomycin administration, particularly after oral administration. Although clinically significant serum concentrations can be obtained in patients treated with oral vancomycin who have concomitant C. difficile colitis and renal failure, there has not been a... ...This case supports the possible occurrence of a true allergic reaction secondary to low-dose oral vancomycin administration.

Identifiers-- ...CLOSTRIDIUM-DIFFICILE COLITIS; ALLERGIC CONTACT-DERMATITIS; PSEUDOMEMBRANOUS COLITIS; SYSTEMIC ABSORPTION; RANITIDINE; TOXICITY; DIARRHEA

Research Fronts: 89-0757 002 (CLOSTRIDIUM-DIFFICILE TOXIN-A; PSEUDOMEMBRANOUS COLITIS; ANTIBIOTIC-ASSOCIATED DIARRHEA)

89-3952 001 (VANCOMYCIN RESISTANCE; INVITRO ACTIVITY; ENTEROCOCCAL INFECTIONS)

Cited References:

10/3,K/54 (Item 19 from file: 34) Links

SciSearch(R) Cited Ref Sci

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01369326 Genuine Article#: GU081 No. References: 10

COMPARATIVE EFFECTS OF CLARITHROMYCIN AND ERYTHROMYCIN ON THE NORMAL INTESTINAL MICROFLORA

Author: BRISMAR B; EDLUND C; NORD CE

Corporate Source: KAROLINSKA INST,HUDDINGE UNIV HOSP,DEPT MICROBIOL/S-14186

HUDDINGE//SWEDEN/ ; KAROLINSKA INST,HUDDINGE UNIV HOSP,DEPT MICROBIOL/S-14186

HUDDINGE//SWEDEN/; KAROLINSKA INST,HUDDINGE UNIV HOSP,DEPT SURG/S-14186

HUDDINGE//SWEDEN/; NATL BACTERIOL LAB/S-10521 STOCKHOLM//SWEDEN/

Journal: SCANDINAVIAN JOURNAL OF INFECTIOUS DISEASES , 1991 , V 23 , N5 , P 635-642

Language: ENGLISH Document Type: ARTICLE ( Abstract Available )

Abstract: ...q 12 h for 7 days. Stool specimens were collected before, during and after antibiotic administration. In the clarithromycin group, the numbers of streptococci and enterobacteria decreased among aerobic microorganisms while in the erythromycin group streptococci, enterococci and enterobacteria decreased and staphylococci increased during antibiotic administration. The anaerobic intestinal microflora was also affected. The alterations were more pronounced in the volunteers...

Identifiers-

Research Fronts: 89-0757 001 (CLOSTRIDIUM-DIFFICILE TOXIN-A; PSEUDOMEMBRANOUS COLITIS; ANTIBIOTIC-ASSOCIATED DIARRHEA)

Cited References:

clostrdifficile.txt

10/3,K/55 (Item 20 from file: 34) Links  
SciSearch(R) Cited Ref Sci  
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01323016 Genuine Article#: GP094 No. References: 41  
VANCOMYCIN

Author: WILHELM MP  
Corporate Source: MAYO CLIN & MAYO FDN, DIV INFECT DIS & INTERNAL MED/ROCHESTER//MN/55905  
Journal: MAYO CLINIC PROCEEDINGS , 1991 , v 66 , N11 , p 1165-1170  
Language: ENGLISH Document Type: ARTICLE ( Abstract Available )  
Abstract: ...bactericidal against most strains of staphylococci and nonenterococcal streptococci. Although rare strains of staphylococci and enterococci that are resistant to vancomycin have been reported, bacterial resistance has thus far not emerged...  
Identifiers-- ...COAGULASE-NEGATIVE STAPHYLOCOCCI; GLYCOPEPTIDE ANTIBIOTICS; ORAL VANCOMYCIN; RENAL-FUNCTION; RESISTANT; THERAPY; DOSAGE; PHARMACOKINETICS; ENDOCARDITIS; ENTEROCOCCI  
Research Fronts: 89-3952 004 (VANCOMYCIN RESISTANCE; INVITRO ACTIVITY; ENTEROCOCCAL INFECTIONS)  
89-0757 001 (CLOSTRIDIUM-DIFFICILE TOXIN-A; PSEUDOMEMBRANOUS COLITIS; ANTIBIOTIC-ASSOCIATED DIARRHEA)  
89-1082 001 (PENICILLIN-BINDING PROTEIN GENES; CLINICAL ISOLATE OF...  
Cited References:

10/3,K/56 (Item 21 from file: 34) Links  
SciSearch(R) Cited Ref Sci  
(c) 2008 The Thomson Corp. All rights reserved.  
01085922 Genuine Article#: FV062 No. References: 31  
A HUMAN LACTOBACILLUS STRAIN (LACTOBACILLUS-CASEI SP STRAIN GG) PROMOTES RECOVERY FROM ACUTE DIARRHEA IN CHILDREN

Author: ISOLauri E; Juntunen M; Rautanen T; Sillanaukee P; Koivula T  
Corporate Source: UNIV TAMPERE, DEPT CLIN SCI/SF-33520 TAMPERE//FINLAND/; TAMPERE UNIV HOSP, DEPT PEDIAT/TAMPERE//FINLAND/; TAMPERE UNIV HOSP, DEPT CLIN CHEM/TAMPERE//FINLAND/  
Journal: PEDIATRICS , 1991 , v 88 , N1 , p 90-97  
Language: ENGLISH Document Type: ARTICLE ( Abstract Available )  
A HUMAN LACTOBACILLUS STRAIN (LACTOBACILLUS-CASEI SP STRAIN GG) PROMOTES RECOVERY FROM ACUTE DIARRHEA IN CHILDREN

Abstract: To determine the effect of a human Lactobacillus strain ( Lactobacillus casei sp strain GG, Gefilac) on recovery from acute diarrhea (82% rotavirus), 71 well-nourished children between 4 and 45 months of age were studied. After oral rehydration, the patients randomly received either Lactobacillus GG-fermented milk product, 125 g (10(10-11) colony-forming units) twice daily (group 1); Lactobacillus GG freeze-dried powder, one dose (10(10-11) colony-forming units) twice daily (group 2); or a placebo, a pasteurized yogurt (group 3) 125 g twice daily; each diet was given for 5 days, in addition... no mucosal disruption and is beneficial for recovery from diarrhea. It is further suggested that Lactobacillus GG in the form of fermented milk or freeze-dried powder is effective in shortening...  
Identifiers-- ...ORAL REHYDRATION; NUTRITIONAL MANAGEMENT; INTESTINAL MICROFLORA; FERMENTED MILK; PERMEABILITY; ACIDOPHILUS; FORMULA  
Research Fronts: 89-0740 002 (DIETARY FIBER; LACTULOSE HYDROGEN BREATH TEST; ORAL REHYDRATION THERAPY; OROCECAL TRANSIT-TIME; BAKING HULLESS BARLEY; ENZYME SUPPLEMENTATION)  
89-0757 001 (CLOSTRIDIUM- DIFFICILE TOXIN-A; PSEUDOMEMBRANOUS COLITIS; ANTIBIOTIC-ASSOCIATED DIARRHEA)  
Cited References:

clostridifficile.txt

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01050381 Genuine Article#: FR053 No. References: 24

INFLUENCE OF ANTIBIOTICS ON THE RECOVERY AND KINETICS OF SACCHAROMYCES-BOULARDII IN RATS

Author: BODDY AV; ELMER GW; MCFARLAND LV; LEVY RH

Corporate Source: UNIV WASHINGTON,DEPT MED CHEM,BG-20/SEATTLE//WA/98195; UNIV WASHINGTON,DEPT MED CHEM,BG-20/SEATTLE//WA/98195; UNIV WASHINGTON,DEPT PHARMACEUT/SEATTLE//WA/98195

Journal: PHARMACEUTICAL RESEARCH , 1991 , V 8 , N6 , P 796-800

Language: ENGLISH Document Type: ARTICLE ( Abstract Available )

INFLUENCE OF ANTIBIOTICS ON THE RECOVERY AND KINETICS OF SACCHAROMYCES-BOULARDII IN RATS

Abstract: *Saccharomyces boulardii* (SB) is a yeast that is used for the prevention and treatment of antibiotic... ...the kinetics and recovery of SB in feces was investigated in rats. Following a single oral dose, SB concentrations in feces were measured for periods of 1 to 6 days. Although... ...in the feces. This antibiotic effect on SB disposition was also found when SB was administered in multiple doses. An eightfold increase in the steady-state output of SB was observed...

Identifiers-- ...CLOSTRIDIUM-DIFFICILE; COLONIZATION RESISTANCE; INDUCED MORTALITY; PREVENTION; MICE; VANCOMYCIN; HAMSTERS; COLITIS

Research Fronts: ...0546 001 (PULSE OXIMETRY; NOSOCOMIAL PNEUMONIA; PROTECTED BRUSH CATHETER SPECIMENS; MECHANICAL VENTILATION)

89-0757 001 ( CLOSTRIDIUM-DIFFICILE TOXIN-A; PSEUDOMEMBRANOUS COLITIS; ANTIBIOTIC-ASSOCIATED DIARRHEA)

Cited References:

10/3,K/58 (Item 23 from file: 34) Links

SciSearch(R) Cited Ref Sci

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01010768 Genuine Article#: FN775 No. References: 27

PASSIVE-IMMUNIZATION OF HAMSTERS AGAINST DISEASE CAUSED BY CLOSTRIDIUM-DIFFICILE BY USE OF BOVINE IMMUNOGLOBULIN-G CONCENTRATE

Author: LYERLY DM; BOSTWICK EF; BINION SB; WILKINS TD

Corporate Source: VIRGINIA POLYTECH INST & STATE UNIV,DEPT ANAEROB MICROBIOL/BLACKSBURG//VA/24061; PROCOR TECHNOL INC/MINNEAPOLIS//MN/55440

Journal: INFECTION AND IMMUNITY , 1991 , V 59 , N6 , P 2215-2218

Language: ENGLISH Document Type: NOTE ( Abstract Available )

PASSIVE-IMMUNIZATION OF HAMSTERS AGAINST DISEASE CAUSED BY CLOSTRIDIUM-DIFFICILE BY USE OF BOVINE IMMUNOGLOBULIN-G CONCENTRATE

Abstract: Gestating Holstein cows were vaccinated with *Clostridium difficile* toxoid prepared from the culture filtrate of a strain that produces high levels of toxins... ...hyperimmune bovine IgG concentrate were protected against *C. difficile* disease. These results suggest that orally administered hyperimmune bovine IgG specific for *C. difficile* culture filtrate may be useful in prophylaxis against... Identifiers-- ...ANTIBIOTIC-ASSOCIATED CECITIS; SACCHAROMYCES-BOULARDII; TOXIN-A; ROTAVIRUS GASTROENTERITIS; MILK IMMUNOGLOBULINS; INDUCED MORTALITY; ESCHERICHIA-COLI; CHOLERA-TOXIN; PREVENTION; SUPPRESSION

Research Fronts: 89-0757 001 (CLOSTRIDIUM-DIFFICILE TOXIN-A; PSEUDOMEMBRANOUS COLITIS; ANTIBIOTIC-ASSOCIATED DIARRHEA)

Cited References:

10/3,K/59 (Item 24 from file: 34) Links

SciSearch(R) Cited Ref Sci

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00977993 Genuine Article#: FK863 No. References: 17

EFFECT OF LACTIC-ACID PRODUCING BACTERIA ON THE HUMAN INTESTINAL MICROFLORA DURING

clostridiffficile.txt

AMPICILLIN TREATMENT

Author: BLACK F; EINARSSON K; LIDBECK A; ORRHAGE K; NORD CE  
Corporate Source: KAROLINSKA INST, HUDDINGE UNIV HOSP, DEPT MICROBIOL/S-14186  
HUDDINGE//SWEDEN/ ; KAROLINSKA INST, HUDDINGE UNIV HOSP, DEPT MICROBIOL/S-14186  
HUDDINGE//SWEDEN/; NATL BACTERIOL LAB/S-10521 STOCKHOLM//SWEDEN/; KAROLINSKA  
INST, HUDDINGE UNIV HOSP, DEPT MED/S-14186 HUDDINGE//SWEDEN/; MARSELISBORG HOSP, DEPT  
MED EPIDEMIOL/AARHUS//DENMARK/  
Journal: SCANDINAVIAN JOURNAL OF INFECTIOUS DISEASES , 1991 , v 23 , n2 , p 247-254  
Language: ENGLISH Document Type: ARTICLE ( Abstract Available )  
Abstract: ...500 mg ampicillin tablets t.i.d. together with capsules containing lactic acid producing bacteria (*Lactobacillus acidophilus* and *Bifidobacterium bifidum*) for 7 days, and the other 10 volunteers were given 500 mg ampicillin tablets... ...the intake of the capsules t.i.d. for another 14 days after the ampicillin administration had been completed. The number of enterococci, streptococci and corynebacteria decreased during ampicillin administration but returned to normal levels after 14 days. Yeasts increased during the antibiotic treatment but... ...before treatment within 14 days. *Escherichia coli* strains were suppressed in most volunteers during ampicillin administration. The numbers of anaerobic gram-positive cocci and rods decreased in most subjects during ampicillin...  
Identifiers- ...LACTOBACILLUS PREPARATION; ANTIMICROBIAL AGENTS; PROPHYLAXIS; DIARRHEA; RISK  
Research Fronts: 89-0757 001 (CLOSTRIDIUM-DIFFICILE TOXIN-A; PSEUDOMEMBRANOUS COLITIS; ANTIBIOTIC-ASSOCIATED DIARRHEA)  
Cited References:

10/3,K/60 (Item 25 from file: 34) Links  
SciSearch(R) Cited Ref Sci  
(c) 2008 The Thomson Corp. All rights reserved.  
00716661 Genuine Article#: EQ380 No. References: 280  
ANTIMICROBIAL THERAPY FOR THE ELDERLY PATIENT

Author: YOSHIKAWA TT  
Corporate Source: VET AFFAIRS MED CTR, OFF GERIATR & EXTENDED CARE 145,810 VERNON AVE  
NW/WASHINGTON//DC/20420  
Journal: JOURNAL OF THE AMERICAN GERIATRICS SOCIETY , 1990 , v 38 , n12 , p  
1353-1372  
Language: ENGLISH Document Type: REVIEW  
Identifiers-- ...URINARY-TRACT INFECTIONS; RESISTANT STAPHYLOCOCCUS-AUREUS;  
DIFFICILE-ASSOCIATED DIARRHEA; SERIOUS BACTERIAL-INFECTIONS; SINGLE-DOSE  
PHARMACOKINETICS; INTRA-ABDOMINAL INFECTIONS; PLUS CLAVULANATE POTASSIUM;  
N-FORMIMIDOYL THIENAMYCIN; IMPAIRED RENAL-FUNCTION  
Research Fronts: ...ENOLATE IMINE CONDENSATION; ALDOL REACTION OF COBALT-COMPLEXED PROPYNALS)  
89-0524 002 (INVITRO ACTIVITY OF ORAL CEPHALOSPORINS; GROUP-C STREPTOCOCCI;  
DESACETYLCEFOTAXIME PHARMACOKINETICS; MIXED INFECTIONS; ANAEROBIC MICROBIOLOGY)  
89-0757 002 (CLOSTRIDIUM-DIFFICILE TOXIN-A; PSEUDOMEMBRANOUS COLITIS;  
ANTIBIOTIC-ASSOCIATED DIARRHEA)  
89-3131 002 (SULBACTAM AMPICILLIN; INVITRO ACTIVITY; SURGICAL INFECTIONS)  
89-3952 002 (VANCOMYCIN RESISTANCE; INVITRO ACTIVITY; ENTEROCOCCAL INFECTIONS)  
89-1077 001 (GENTAMICIN PHARMACOKINETIC PARAMETERS; AMINOGLYCOSIDE DOSING  
REQUIREMENTS; SLOW-RELEASE FORMULATIONS OF THEOPHYLLINE...)

10/3,K/61 (Item 26 from file: 34) Links  
SciSearch(R) Cited Ref Sci  
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00576007 Genuine Article#: EC907 No. References: 33  
THE GROWTH-INHIBITORY EFFECT OF THE ENTEROCOCCUS-FAECALIS BACTERIOCIN ENCODED BY  
PAD1 EXTENDS TO THE ORAL STREPTOCOCCI

clostridifficile.txt

Author: JETT BD; GILMORE MS

Corporate Source: UNIV OKLAHOMA, HLTH SCI CTR, DEPT MICROBIOL & IMMUNOL, BIOMED SCI BLDG, ROOM 1035, POB 26901/OKLAHOMA CITY//OK/73190; UNIV OKLAHOMA, HLTH SCI CTR, DEPT MICROBIOL & IMMUNOL, BIOMED SCI BLDG, ROOM 1035, POB 26901/OKLAHOMA CITY//OK/73190

Journal: JOURNAL OF DENTAL RESEARCH, 1990, V 69, N10, P 1640-1645

Language: ENGLISH Document Type: ARTICLE

THE GROWTH-INHIBITORY EFFECT OF THE ENTEROCOCCUS-FAECALIS BACTERIOCIN ENCODED BY PAD1 EXTENDS TO THE ORAL STREPTOCOCCI

Research Fronts: ...PLAQUE; BLACK-PIGMENTED BACTEROIDES; FLAP SURGERY; RADIOGRAPHIC ALVEOLAR BONE LOSS; PROBING DEPTH)

88-1941 001 (CLOSTRIDIUM- DIFFICILE TOXIN-A; BACTERIOCIN TYPING SYSTEM; DIARRHEA IN INFANTS)

Cited References:

10/3,K/62 (Item 1 from file: 45) Links

Fulltext available through: STIC Full Text Retrieval Options

EMCare

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00342231 EMCare No: 27390970

Recurrent Clostridium difficile disease following ciprofloxacin use

Bauwens J.E.; McFarland L.V.; Melcher S.A.

Dr. L.V. McFarland, Biocodex, Inc., 1910 Fairview Ave. East, Seattle, WA 98102  
United States

Annals of Pharmacotherapy ( ANN. PHARMACOTHER. ) ( United States ) 1997, 31/9 (1090)

CODEN: APHRE ISSN: 1060-0280

DOCUMENT TYPE: Journal ; Article

LANGUAGE: ENGLISH

RECORD TYPE: Citation

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Recurrent Clostridium difficile disease following ciprofloxacin use

DESCRIPTORS:

\* ciprofloxacin; \*Clostridium difficile  
vancomycin; metronidazole; Clostridium difficile toxin A; colestyramine;  
Staphylococcus aureus; Saccharomyces boulardii; infection risk; oral drug  
administration; priority journal; pseudomembranous colitis; recurrent infection;  
human; foot ulcer; drug use; disease association; dose response...  
TERMS (UNCONTROLLED):

10/3,K/63 (Item 2 from file: 45) Links

Fulltext available through: STIC Full Text Retrieval Options

EMCare

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00187910 EMCare No: 26246097

Clostridium difficile infection

Groschel D.H.M.

D.H.M. Groschel, Department of Pathology, University of Virginia, School of  
Medicine, Charlottesville, VA 22908 United States

Critical Reviews in Clinical Laboratory Sciences ( CRIT. REV. CLIN. LAB. SCI. ) ( United States ) 1996, 33/3 (203-245)

CODEN: CRCLB ISSN: 1040-8363

DOCUMENT TYPE: Journal ; Review

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 199

RECORD TYPE: Abstract

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clostridium difficile.txt

Clostridium difficile infection

The spore-forming anaerobe *Clostridium difficile* has become a serious enteropathogen. Changes in the composition of natural intestinal flora, mainly due... ...directly in stool. Therapy consists of stopping all systemic antibiotic treatment and the use of oral metronidazole or vancomycin. There may be more relapses after vancomycin therapy, and the increasing vancomycin resistance of *Enterococcus* is worrisome. Prevention, especially of nosocomial spread, requires isolation and enforced handwashing. For epidemiological studies...

DESCRIPTORS:

\* toxin; \*DNA; \*antibiotic agent; \*therapy; \**Clostridium difficile*; \*diarrhea; \*DNA probe; \*prevention; \*pseudomembranous colitis; \*infection  
...metronidazole; glutamate dehydrogenase; immunoglobulin A; bacitracin; narcotic agent; quinoxaline derivative; teicoplanin; cytotoxin; antidiarrheal agent; colestipol; *Clostridium difficile* toxin A; *Clostridium difficile* toxin B; colestyramine; relapse; leukocyte; polymerase chain reaction; hand washing; enzyme linked immunosorbent assay; diagnosis; antibiotic therapy; *Enterococcus*; intestine flora; bacterial colonization; bacterial gene; antibiotic resistance; intestine ulcer; intestine necrosis; intestine epithelium; feces culture; laboratory diagnosis; hospital infection; immunoassay; human; occult blood; mouse; nonhuman; oral drug administration; priority journal; radiodiagnosis; rat; recurrent disease; risk factor; bacterium; laboratory; ulcer; necrosis; heterozygote; bacterial spore...

TERMS (UNCONTROLLED):

10/3/K/64 (Item 3 from file: 45) Links

Fulltext available through: STIC Full Text Retrieval Options

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00069102 EMCare No: 25188937

The challenge of vancomycin-resistant enterococci: A clinical and epidemiologic study

Lam S.; Singer C.; Tucci V.; Northland V.H.; Pfaffer M.A.; Isenberg H.D.  
Dr. C. Singer, Long Island Jewish Medical Center, 270-05 76th Ave., New Hyde Park,  
NY 11040 United States

American Journal of Infection Control ( AM. J. INFECT. CONTROL ) ( United States )  
1995 , 23/3 (170-180)

CODEN: AJICD ISSN: 0196-6553

DOCUMENT TYPE: Journal ; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

RECORD TYPE: Abstract

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The challenge of vancomycin-resistant enterococci: A clinical and epidemiologic study

Background: Vancomycin-resistant enterococci have been recovered with increasing frequency from hospitalized patients. Risk factors, mode of nosocomial transmission... ...have not been completely delineated. Methods: We studied 53 patients (group A) with vancomycin-resistant enterococci isolated from various clinical specimens and also surveyed for vancomycin-resistant enterococci in stool specimens submitted for *Clostridium difficile* toxin assays (group B). Stool specimens submitted for identification of bacterial pathogens and stool specimens from hospital employees were also analyzed for vancomycin-resistant enterococci. Results: Seventy-six isolates of vancomycin-resistant enterococci were recovered in group A. Five of these patients harbored vancomycin-resistant enterococci on admission. Fifty-three of 289 group B stool specimens submitted for *C. difficile* toxin assays yielded vancomycin-resistant enterococci. Cephalosporins and vancomycin

*clostridifficile.txt*

were the most common antimicrobial agents received by both groups of patients. *Enterococcus faecium* isolates were more resistant than *Enterococcus faecalis* isolates to antimicrobial agents. All isolates exhibited high level aminoglycoside resistance and were not... ...least 15 different molecular clones of *E. faecium* and three of *E. faecalis*. Vancomycin resistant enterococcal bacteremia was associated with a 100% in hospital mortality rate. Conclusions: Multidrug-resistant and vancomycin-resistant enterococci have become important nosocomial pathogens that are difficult to treat. Vancomycin-resistant enterococcal bacteremia was associated with a poor prognosis. We found a high rate of colonization in...

DESCRIPTORS:

\* vancomycin resistant *Enterococcus*; \*epidemiology  
vancomycin; toxin; beta lactamase; antiinfective agent; cephalosporin derivative; *Clostridium difficile* toxin A; doxycycline; erythromycin; gentamicin; imipenem; sultamicillin; metronidazole; ticarcillin; piperacillin; streptomycin; ampicillin; aminoglycoside; antibiotic agent; amikacin; aminoglycoside antibiotic agent ; azlocillin; chloramphenicol; ciprofloxacin; timentin; clarithromycin; clindamycin; bacteremia; mortality; patient; hospital patient; *Enterococcus faecalis*; assay; prognosis; pathogenesis; controlled study; diarrhea; feces; female; human; major clinical study; male; urinary tract infection; minimum inhibitory concentration; oral drug administration; intravenous drug administration; risk factor; *Clostridium difficile*; hospital personnel; *Enterococcus faecium*; clone; colitis; antibiotic resistance; infection control; adult; aged; catheter

TERMS (UNCONTROLLED):

10/3,K/65 (Item 1 from file: 50) Links

Fulltext available through: STIC Full Text Retrieval Options

CAB Abstracts

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0008034991 CAB Accession Number: 20013048576

*Saccharomyces boulardii* stimulates intestinal immunoglobulin A immune response to *Clostridium difficile* toxin A in mice.

Amir Qamar; Samer Aboudola; Warny, M.; Michetti, P.; Pothoulakis, C.; LaMont, J. T.; Kelly, C. P.

Gastroenterology Division, Beth Israel Deaconess Medical Center, Harvard Medical School, 330 Brookline Ave., Boston, MA 02215, USA.

Infection and Immunity vol. 69 ( 4 ): p.2762-2765

Publication Year: 2001

ISSN: 0019-9567

Digital Object Identifier: 10.1128/IAI.69.4.2762-2765.2001

Publisher: ASM Press, American Society for Microbiology Washington , USA

Language: English Record Type: Abstract

Document Type: Journal article

*Saccharomyces boulardii* stimulates intestinal immunoglobulin A immune response to *Clostridium difficile* toxin A in mice.

*Saccharomyces boulardii* is a nonpathogenic yeast that protects against antibiotic-associated diarrhoea and recurrent *Clostridium difficile* colitis. The administration of *C. difficile* toxoid A by gavage to *S. boulardii* -fed BALB/c mice caused...

Identifiers: ...*Saccharomyces boulardii*

CAS Registry Numbers:

Organism Descriptors: *Clostridium difficile*; ... ...*Saccharomyces*

Geographic Names:

Broader Terms: ...*Saccharomyces*

CABICodes:

10/3,K/66 (Item 1 from file: 73) Links

Fulltext available through: STIC Full Text Retrieval Options

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clostrdifficile.txt  
0079197124 EMBASE No: 2002360919  
Clostridium difficile

Stoddart B.; Wilcox M.H.  
Department of Microbiology, General Infirmary, University of Leeds, Leeds LS1 3EX, United Kingdom  
Corresp. Author/Affil: Wilcox M.H.: Department of Microbiology, General Infirmary, University of Leeds, Leeds LS1 3EX, United Kingdom  
Corresp. Author Email: markwi@pathology.leeds.ac.uk

Current Opinion in Infectious Diseases ( Curr. Opin. Infect. Dis. ) ( United Kingdom ) October 1, 2002 , 15/5 (513-518)  
CODEN: COIDE ISSN: 0951-7375  
Document Type: Journal ; Review Record Type: Abstract  
Language: English Summary Language: English  
Number of References: 51  
Clostridium difficile

Clostridium difficile is the most commonly identified infective cause of antibiotic associated diarrhoea. Broad spectrum antibiotics, are...

Drug Descriptors:

\*

antibiotic agent--drug therapy--dt; cephalosporin; clarithromycin; clindamycin; Clostridium difficile toxin A; Clostridium difficile toxin B; Clostridium toxin; cytotoxin; metronidazole--drug administration--ad; metronidazole--drug therapy--dt; metronidazole--intravenous drug administration--iv; metronidazole--oral drug administration--po; penicillin derivative; polymer--clinical trial --ct; polymer--drug therapy--dt; polymer--oral drug administration--po; polymer--pharmacology--pd; probiotic agent--clinical trial--ct; probiotic agent--drug therapy--dt; probiotic agent--oral drug administration--po; quinoline derived antiinfective agent; toxoid--clinical trial--ct; toxoid --drug therapy--dt; unclassified drug; vancomycin--drug administration--ad; vancomycin--drug therapy--dt; vancomycin --intragastric drug administration--ig; vancomycin--oral drug administration--po

Medical Descriptors:

\* Clostridium difficile; \*diarrhea--diagnosis--di; \*diarrhea --drug resistance--dr; \*diarrhea--drug therapy--dt; \*diarrhea--epidemiology --ep; \*diarrhea...  
...identification; clinical trial; disease predisposition; human; immunization; immunoassay; immunogenicity; infection risk; intermethod comparison; laboratory diagnosis; Lactobacillus; nonhuman; pathogenicity; review; Saccharomyces boulardii

10/3,K/67 (Item 2 from file: 73) Links  
Fulltext available through: STIC Full Text Retrieval Options

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0079146807 EMBASE No: 2002310575

Clinical microbiological case: A heart transplant recipient with diarrhea and abdominal pain

Munoz P.; Palomo J.; Yanez J.; Bouza E.  
Servicio de Microbiologia, Clinica-Enfermedades Infecciosas, Hospital General 'Gregorio Maranon', Ibiza 47, 28009 Madrid, Spain  
Corresp. Author/Affil: Munoz P.: Servicio de Microbiologia, Clinica-Enfermedades Infecciosas, Hospital General 'Gregorio Maranon', Ibiza 47, 28009 Madrid, Spain  
Corresp. Author Email: pmunoz@micro.hggm.es

Clinical Microbiology and Infection ( Clin. Microbiol. Infect. ) ( United Kingdom ) August 1, 2001 , 7/8 (451-452+458-459)

CODEN: CMINF ISSN: 1198-743X

Item Identifier (DOI): 10.1046/j.1198-743X.2001.00315.x

Document Type: Journal ; Article Record Type: Citation

clostridifficile.txt

Language: English  
Number of References: 21  
Drug Descriptors:

\*  
...azathioprine--drug combination--cb; azathioprine--drug therapy--dt; cefoxitin; cilastatin plus imipenem--drug therapy--dt; Clostridium difficile toxin B--endogenous compound--ec; corticosteroid derivative--drug combination--cb; corticosteroid derivative --drug therapy--dt; cotrimoxazole--drug...  
...cyclosporin--drug therapy--dt; fructose; ganciclovir--drug therapy--dt; immunoglobulin; metronidazole--drug therapy--dt; metronidazole--oral drug administration--po; ranitidine--drug therapy--dt; vancomycin --drug therapy--dt; vancomycin--oral drug administration--po

Medical Descriptors:

\* ...complication--co; \*bacterial infection--diagnosis--di; \*bacterial infection--drug therapy--dt; \*bacterial infection--etiology--et; \* Clostridium difficile  
...complication--drug therapy--dt; postoperative complication--etiology--et ; postoperative complication--prevention--pc; priority journal; recipient; Saccharomyces boulardii; treatment outcome

10/3,K/68 (Item 3 from file: 73) Links

Fulltext available through: STIC Full Text Retrieval Options

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0079146796 EMBASE No: 2002310564  
Clostridium difficile

Bouza E.

Clinical Microbiology and Infection ( Clin. Microbiol. Infect. ) ( United Kingdom ) August 1, 2001 , 7/8 (403)  
CODEN: CMINF ISSN: 1198-743X  
Item Identifier (DOI): 10.1046/j.1198-743X.2001.00327.x  
Document Type: Journal ; Editorial Record Type: Citation  
Language: English  
Clostridium difficile

Drug Descriptors:

\*  
antibiotic agent--adverse drug reaction--ae; antibiotic agent--drug therapy --dt; antibiotic agent--oral drug administration--po; antibiotic agent--parenteral drug administration--pa; antibiotic agent--pharmaceutics--pr; antibiotic agent--pharmacoeconomics--pe; antibiotic agent--pharmacology--pd; antiinfective agent--adverse drug reaction--ae; antiinfective agent--drug therapy--dt; antiinfective agent-- oral drug administration--po; antiinfective agent--parenteral drug administration--pa; antiinfective agent--pharmaceutics--pr; antiinfective agent--pharmacology--pd; Clostridium difficile toxin A--endogenous compound--ec; Clostridium difficile toxin B--endogenous compound--ec; metronidazole--drug therapy--dt; metronidazole--oral drug administration--po; metronidazole--parenteral drug administration--pa; metronidazole--pharmacology--pd; vancomycin --drug therapy--dt; vancomycin--oral drug administration--po; vancomycin--pharmaceutics--pr; vancomycin--pharmacology--pd

Medical Descriptors:

\* ...dr; \*bacterial infection--drug therapy--dt; \*bacterial infection--etiology--et; \*bacterial infection--side effect--si; \*Clostridium difficile; \*diarrhea--diagnosis--di; \*diarrhea--drug resistance--dr; \*diarrhea--drug therapy--dt; \*diarrhea--etiology--et; \*diarrhea...  
...etiology--et; human; infection control; laboratory diagnosis; nonhuman; pathogenicity; priority journal; pseudomembranous colitis--etiology--et; Saccharomyces boulardii

clostridium\_difficile.txt

10/3,K/69 (Item 4 from file: 73) Links

Fulltext available through: STIC Full Text Retrieval Options

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0079143615 EMBASE No: 2002307383

Clostridium difficile toxins and enterococcal translocation in vivo and in vitro

Feltis B.A.; Garni R.M.; Wells C.L.

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Corresp. Author/Affil: Feltis B.A.: University of Minnesota, Department of Surgery, MMC 195, 420 Delaware St., SE, Minneapolis, MN 55455, United States

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Journal of Surgical Research ( J. Surg. Res. ) ( United States ) December 1, 2001, 97/1 (97-102)

CODEN: JSGRA ISSN: 0022-4804

Item Identifier (DOI): 10.1006/jssre.2001.6130

Document Type: Journal ; Conference Paper Record Type: Abstract

Language: English Summary language: English

Number of References: 23

Clostridium difficile toxins and enterococcal translocation in vivo and in vitro

Background. Clostridium difficile toxins alter permeability in cultured enterocytes and may alter intestinal epithelial permeability to bacteria in...  
...were designed to test the effects of C. difficile toxins on in vitro interactions of Enterococcus gallinarum with cultured enterocytes, as well as on translocation of E. gallinarum in mice. Materials... ...sacrificed after another 24 h for analysis of cecal bacteria, cecal C. difficile toxin, and enterococcal translocation. Cecal C. difficile toxin was assayed as cytopathic effects on human foreskin fibroblasts. Results... ...from the mesenteric lymph nodes of 97% of mice orally inoculated with saline followed by oral E. gallinarum, but only 37% of mice orally inoculated with C. difficile followed by oral E. gallinarum ( $P < 0.01$ ). Conclusions. These results suggested that observations with cultured enterocytes, demonstrating...

Drug Descriptors:

\* Clostridium difficile toxin A--drug toxicity --to; \*Clostridium difficile toxin A--endogenous compound--ec; \*Clostridium difficile toxin B--drug toxicity--to;

\*Clostridium difficile toxin B--endogenous compound--ec

Medical Descriptors:

\*

...overgrowth; bacterium culture; cecum; cell culture; cell interaction; cell strain CACO 2; cell strain HT29; Clostridium difficile; conference paper; controlled study; cytopathogenic effect; Enterococcus gallinarum; female; fibroblast; human; human cell; in vitro study; in vivo study; inoculation; internalization; intestine...

Orig. Descriptors:

10/3,K/70 (Item 5 from file: 73) Links

Fulltext available through: STIC Full Text Retrieval Options

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0078387304 EMBASE No: 2000436914

Treatment and prevention of antibiotic associated diarrhea

Bergogne-Berezin E.

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Author email: berezbiol@aol.com

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Corresp. Author Email: berezbiol@aol.com

*clostridium difficile.txt*

International Journal of Antimicrobial Agents ( Int. J. Antimicrob. Agents ) ( Netherlands ) December 1, 2000 , 16/4 (521-526)

CODEN: IAAGE ISSN: 0924-8579

Publisher Item Identifier: S0924857900002934

Item Identifier (DOI): 10.1016/S0924-8579(00)00293-4

Document Type: Journal ; Article Record Type: Abstract

Language: English Summary Language: English

Number of References: 25

...5 to 25%. The major form of intestinal disorders is the pseudomembranous colitis associated with *Clostridium difficile* which occurs in 10-20% of all AAD. In most cases of AAD discontinuation or... organisms have been used in treatment or prophylaxis of AAD such as selected strains of *Lactobacillus acidophilus*, *L. bulgaricus*, *Bifidobacterium longum*, and *Enterococcus faecium*. Another biotherapeutic agent, a non-pathogenic yeast, *Saccharomyces boulardii* has been used. In animal models of *C. difficile* colitis initiated by clindamycin, animals...

Drug Descriptors:

\* ...agent--adverse drug reaction--ae; \*antibiotic agent--clinical trial--ct; \*antibiotic agent--drug therapy--dt; \**Clostridium difficile* toxin A--drug toxicity--to; \**Clostridium difficile* toxin A--endogenous compound--ec; \* *Clostridium difficile* toxin B--drug toxicity --to; \**Clostridium difficile* toxin B --endogenous compound--ec; \*probiotic agent--clinical trial--ct; \* probiotic agent--drug therapy--dt  
...colestipol--clinical trial--ct; colestipol--drug therapy--dt; cotrimoxazole--drug therapy--dt; cotrimoxazole--parenteral drug administration--pa; cytotoxin--drug toxicity--to; cytotoxin --endogenous compound--ec; enterotoxin--drug toxicity--to; enterotoxin --endogenous compound--ec; fusidic acid--clinical trial--ct; fusidic acid --drug therapy--dt; fusidic acid--oral drug administration --po; metronidazole--clinical trial--ct; metronidazole--drug therapy--dt; metronidazole--oral drug administration--po; quinolone derivative--drug therapy--dt; teicoplanin--clinical trial--ct; teicoplanin --drug therapy--dt; teicoplanin--oral drug administration--po ; tetracycline derivative--drug therapy--dt; tetracycline derivative-- oral drug administration--po; vancomycin--clinical trial--ct; vancomycin--drug therapy--dt; vancomycin--oral drug administration--po

Medical Descriptors:

article; *Bifidobacterium longum*; clinical trial; *Clostridium difficile*; colony forming unit; disease severity; drug efficacy; drug safety; drug withdrawal; *Enterococcus faecium*; hospital hygiene ; human; intensive care unit; intestine flora; *Lactobacillus*; *Lactobacillus acidophilus*; morbidity; nonhuman; priority journal; relapse; risk factor; *Saccharomyces boulardii*

Orig. Descriptors:

Medical Terms (Uncontrolled): *Lactobacillus bulgaricus*

Orig. Terms (Uncontrolled):

10/3, K/71 (Item 6 from file: 73) Links

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0078014165 EMBASE No: 2000063353

Pseudomembranous colitis: An update

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Corresp. Author Email: surawicz@u.washington

Canadian Journal of Gastroenterology ( Can. J. Gastroenterol. ) ( Canada )

January 1, 2000 , 14/1 (51-56)

CODEN: CJGAE ISSN: 0835-7900

Document Type: Journal ; Review Record Type: Abstract

*clostridium difficile.txt*

Language: English   Summary Language: English; French  
Number of References: 48

*Clostridium difficile* is the most common nosocomial infection of the gastrointestinal tract. Most cases are associated with.... have been used. Retreatment with antibiotics is almost always necessary. In addition, the nonpathogenic yeast *Saccharomyces boulardii* has been showed to be of benefit as an adjunct in preventing further recurrences.

Drug Descriptors:

\*

antibiotic agent; bacitracin--drug therapy--dt; bacitracin--oral drug administration--po; bacitracin--pharmacoeconomics--pe; *Clostridium difficile* toxin A--endogenous compound--ec; *Clostridium difficile* toxin B --endogenous compound--ec; colestyramine--drug therapy--dt; diphenoxylate --drug therapy--dt; eremomycin--drug development--dv... .adverse drug reaction--ae; metronidazole--clinical trial--ct; metronidazole--drug therapy--dt; metronidazole--intravenous drug administration--iv; metronidazole--oral drug administration--po; metronidazole--pharmacoeconomics--pe; ramoplanin --drug development--dv; teicoplanin--drug therapy--dt; vancomycin--adverse drug reaction--ae; vancomycin--clinical trial--ct; vancomycin--drug therapy --dt; vancomycin--intravenous drug administration--iv; vancomycin-- oral drug administration--po; vancomycin--pharmacoeconomics --pe

Medical Descriptors:

bacterial overgrowth; bacterium carrier; clinical trial; *Clostridium difficile*; diarrhea; drug contraindication; drug cost; early diagnosis; enzyme linked immunosorbent assay; feces culture; hospital infection... .effect--si; nonhuman; peripheral neuropathy--side effect--si; priority journal; rash--side effect--si; review; *Saccharomyces boulardii*; taste disorder--side effect--si; vomiting--side effect--si

Orig. Descriptors:

10/3, K/72 (Item 7 from file: 73) Links  
Fulltext available through: STIC Full Text Retrieval Options

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0077673666      EMBASE No: 1999159858

*Clostridium difficile* infection in children

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Clinical Microbiology Newsletter ( Clin. Microbiol. News1. ) ( United States ) April 1, 1999 , 21/7 (49-53)

CODEN: CMNEE   ISSN: 0196-4399

Item Identifier (DOI): 10.1016/S0196-4399(99)80016-6

Document Type: Journal ; Review Record Type: Citation

Language: English

Number of References: 36

*Clostridium difficile* infection in children

Drug Descriptors:

\*

anion exchange resin; antibiotic agent--adverse drug reaction--ae; antibiotic agent--drug administration--ad; antibiotic agent--drug therapy--dt; antibiotic agent--pharmacokinetics--pk; antineoplastic agent; *Clostridium difficile* toxin A; *Clostridium difficile* toxin B; colestyramine; cytotoxin; enterotoxin; immunoglobulin A--endogenous compound--ec; metronidazole--adverse drug reaction--ae; metronidazole--drug administration--ad; metronidazole--drug therapy--dt; metronidazole --pharmacokinetics--pk; neurokinin--endogenous compound--ec; receptor

**clostridium difficile.txt**

--endogenous compound--ec; vancomycin--adverse drug reaction--ae; vancomycin--drug administration--ad; vancomycin--drug therapy--dt; vancomycin--pharmacokinetics--pk; virulence factor

**Medical Descriptors:**

\* bacterial infection--diagnosis--di; \*bacterial infection--drug therapy--dt;

\*bacterial infection--therapy--th; \*Clostridium difficile

...effect--si; drug absorption; endoscopy; enzyme linked immunosorbent assay;

gastrointestinal symptom--side effect--si; human; Lactobacillus;

nephrotoxicity--side effect--si; nonhuman; oral drug administration; receptor

binding; relapse; review; Saccharomyces boulardii; symptomatology

10/3,K/73 (Item 8 from file: 73) Links

Fulltext available through: STIC Full Text Retrieval Options

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0077622781 EMBASE No: 1999108940

Pseudomembranous colitis: Causes and cures

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Digestion ( Digestion ) ( Switzerland ) March 1, 1999 , 60/2 (91-100)

CODEN: DIGEB ISSN: 0012-2823

Document Type: Journal ; Review Record Type: Abstract

Language: English Summary Language: English

Number of References: 89

Clostridium difficile is the most common nosocomial pathogen of the gastrointestinal tract and has increased in frequency... ...assay for cytotoxin B or detection of antigens in the stool by rapid enzyme immunoassays. Oral therapy with metronidazole 250 mg 4 times a day for 10 days is the recommended... ...its use must be limited to decrease the development of vancomycin-resistant organisms such as enterococci. Vancomycin (125-500 mg 4 times a day for 10 days) should be limited to... ...tapered regimen is often effective as are efforts to normalize the fecal flora. The yeast Saccharomyces boulardii has been proven in controlled trials to reduce recurrences when given as an adjunct...

**Drug Descriptors:**

\*  
...cephalosporin--adverse drug reaction--ae; cisplatin--adverse drug reaction--ae; clindamycin--adverse drug reaction--ae; clostridium difficile toxin a--drug toxicity--to; clostridium difficile toxin b--drug toxicity --to; colestyramine--drug therapy--dt; cotrifamole--adverse drug reaction --ae; cotrifamole--drug combination...

**Medical Descriptors:**

abdominal pain; antibiotic therapy; clostridium difficile; diarrhea; enzyme immunoassay; feces analysis; fever; human; intestine flora ; intravenous drug administration; nausea--side effect--si; occult blood; oral drug administration; pathophysiology; peripheral neuropathy--side effect--si; personal hygiene; priority journal; recurrent disease; review; risk factor; saccharomyces boulardii; symptom; taste disorder--side effect--si; vomiting--side effect--si

**Orig. Descriptors:**

10/3,K/74 (Item 9 from file: 73) Links

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0077369538 EMBASE No: 1998279739

Clostridium difficile infection. Current problems

Infekzione da Clostridium difficile. Aspetti attuali

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Recenti Progressi in Medicina ( Recenti Prog. Med. ) ( Italy ) September 5, 1998 , 89/7-8 (385-394)

CODEN: RPMDA ISSN: 0034-1193

Document Type: Journal ; Review Record Type: Abstract

Language: Italian Summary Language: English; Italian

Number of References: 67

Clostridium difficile is a gram-positive anaerobe that forms subterminal spores. It is now one of major... . . . . . diarrhea (antibiotic associated diarrhea) to fatal pseudomembranous colitis (PMC). The current therapy is based on oral administration of metronidazole or vancomycin. In patients non responders or that continue to relapse can be used other forms of therapy: antibiotic (teicoplanine, bacitracine, rifamixine); anion exchange resin (colestipol, colestiramine); probiotic therapy (S.boulardii, lactobacilli and fecal enemas). New and improved studies will lead to new and better ways of...

Drug Descriptors:

\*

antibiotic agent--drug therapy--dt; clostridium difficile toxin a--drug toxicity--to; clostridium difficile toxin b--drug toxicity--to; unclassified drug

Medical Descriptors:

\* clostridium difficile; \*gram negative infection--drug therapy --dt

10/3,K/75 (Item 10 from file: 73) Links

Fulltext available through: STIC Full Text Retrieval Options

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0076143579 EMBASE No: 1995190834

Concurrence of Clostridium difficile toxin A enzyme-linked immunosorbent assay, fecal lactoferrin assay, and clinical criteria with C. difficile cytotoxin titer in two patient cohorts

Schleupner M.A.; Garner D.C.; Sosnowski K.M.; Schleupner C.J.; Barrett L.J. ; Silva E.; Hirsch D.; Guerrant R.L.

Geographic/Intl. Medicine Division, Department of Medicine, Virginia Univ. School of Medicine, Charlottesville, VA 22908, United States

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Journal of Clinical Microbiology ( J. CLIN. MICROBIOL. ) ( United States ) July 7, 1995 , 33/7 (1755-1759)

CODEN: JCMID ISSN: 0095-1137

Document Type: Journal ; Article Record Type: Abstract

Language: English Summary Language: English

Concurrence of Clostridium difficile toxin A enzyme-linked immunosorbent assay, fecal lactoferrin assay, and clinical criteria with C. difficile cytotoxin titer...

The accurate and sensitive diagnosis of Clostridium difficile -related diarrhea, normally treated with vancomycin, has become increasingly important in light of the emergence of dangerous new strains of vancomycin-resistant enterococci. In order to

clostridium difficile.txt

improve the threshold for *C. difficile* diagnosis and treatment, a number of...  
Drug Descriptors:  
\* *clostridium difficile* toxin a--drug toxicity --to; \**clostridium difficile* toxin b--drug toxicity--to; \*lactoferrin  
*metronidazole*--drug administration--ad; *metronidazole*--drug therapy --dt;  
*vancomycin*--drug therapy--dt  
Medical Descriptors:  
\* *clostridium difficile*; \**diarrhea*--diagnosis--di; \**diarrhea* --drug therapy--dt;  
\**diarrhea*--etiology--et  
...cell; cytotoxicity; enzyme linked immunosorbent assay; feces; human; latex  
agglutination test; major clinical study; nonhuman; oral drug administration;  
priority journal

10/3, K/76 (Item 1 from file: 149) Links  
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01811857 Supplier Number: 53408468 (USE FORMAT 7 OR 9 FOR FULL TEXT )  
Recognizing and Managing Clostridium Difficile- Associated Diarrhea.

Miller, Joanne M.; Walton, Jane C.; Tordecilla, Lydia L.  
MedSurg Nursing , 7 , 6 , 348(1)

Dec ,  
1998

Publication Format: Magazine/Journal; Refereed

ISSN: 1092-0811

Language: English

Record Type: Fulltext; Abstract Target Audience: Professional

Word Count: 5140 Line Count: 00464

Recognizing and Managing Clostridium Difficile- Associated Diarrhea.

Abstract: *Clostridium difficile* is responsible for over 75% of the diarrhea-associated enteric infections acquired during a hospital...

Abstract:

Text:

*Clostridium difficile*-associated diarrhea  
poses a significant physical risk and cost to the recovery of hospitalized  
older adults. C...

...mucoid, malodorous stools a day. His temperature is 101 F rectally. A stool specimen for *Clostridium difficile* (*C. difficile*) toxin is obtained and is positive.

Diarrhea can pose a significant health threat...

...to 20% in older debilitated patients (Holmes & Notarangelo, 1987).

Risk factors

According to Bartlett (1986), *Clostridium difficile* should be suspected as an enteric pathogen in any patient who develops a diarrhea or...

...Intestinal obstruction

\* Hirschsprung's disease

\* Necrotizing enterocolitis

\* History of cerebral toxoplasmosis or

## clostridium difficile.txt

cytomegalovirus infection

### Pathophysiology

*Clostridium difficile* is an opportunistic spore-forming gram-positive anaerobic bacillus. It produces at least two exotoxins, *Clostridium difficile*, toxin A, primarily an enterotoxin, and toxin B, a cytotoxin (Gerding et al., 1995). These toxins bind...Monitor for re-occurrence.

### Management

\* Enforce strict contact isolation (begin before diagnosis).

\* Avoid antiperistaltic agents.

\* Administer

appropriate medications (metronidazole, cholestyramine, yeast preparations, oral vancomycin).

\* Maintain adequate fluid and electrolyte balance.

\* Prevent falls.

\* Maintain skin integrity.

\* Provide psychological support...

...colitis (Bartlett, 1997).

The nurse should carefully monitor the number, consistency, and amount of stools. Oral and intravenous intake, urinary output, and frequent weights must be done. Assessments for dehydration -- thirst...

...to stop the implicated agent, provide supportive measures, avoid the use of antiperistaltic agents, and administer specific antimicrobial agents when ordered. Supportive measures include essential rehydration with appropriate electrolytes and correction...

...resins, and medications that alter fecal flora. Metronidazole (250 mg to 500 mg tid) or oral vancomycin (125 mg to 500 mg qid) for 7 to 14 days are the usual...

...same course (LaMont, 1995). Vancomycin also has a bitter taste and is nephrotoxic and ototoxic. Oral vancomycin is preferred over intravenous vancomycin because the IV route does not always reach effective ...in a noncarbonated beverage or applesauce (Holmes & Notarangelo, 1987).

Probiotics or the use of yeasts, lactobacilli, or normal colonic flora are another option for treatment to re-establish the normal flora of the gut. Lactobacillus preparations, such as Lactinex(R), are used to recolonize the GI tract. There are few controlled studies of the effectiveness of lactobacilli. Lactobacilli are not dominant organisms in normal fecal flora and therefore recolonization is more difficult (Bartlett, 1986; Fekety & Shah, 1993; LaMont, 1995). A nonpathogenic yeast, *Saccharomyces boulardii* (*S. boulardii*), is widely used in Europe. Results of a recent trial in the...

...it is effective in preventing recurrences of *C. difficile* when used as an adjunct to oral antibiotic therapy (Fekety et al., 1997). *S. boulardii* binds to toxin A and reduces or...

...not permanently colonize the gut (Fekety & Shah, 1993; LaMont, 1995). The use of active culture yogurt to help replace flora has been suggested by some clinicians; however, in studies with experimental animals, yogurt has not prevented antibiotic associated diarrhea

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(LaMont, 1995). Fecal enemas also have been suggested to...

...require a more complicated treatment regimen, which includes a 10 to 14 day course of oral vancomycin or metronidazole followed by a 3 week course of cholestyramine, cholestyramine plus lactobacillus, and low-dose vancomycin (Vogel, 1995). It also is suggested that the use of antibiotics...

...oatmeal, rice, potatoes, bananas, peaches, apricots, pears, strawberries) can help relieve diarrhea (Anastasi & Sun, 1996).

Oral rehydration must be quickly implemented "because by the time the first diarrheal stool is passed...assay be done to diagnose C. difficile.

Interventions focus on assessing and managing possible complications, administrating specific antibiotics, strict contact isolation, and teaching. Complications of C. difficile include fluid and electrolyte...

...uncontrollable diarrhea, and safety risks due to falls. Metronidazole is the first choice antibiotic, with oral vancomycin, cholestyramine, and specific yeast preparations as alternative or concurrent therapy. Maintaining contact isolation prevents...

...the HIV patient. American Journal of Nursing, 96(8), 35-42.

Bartlett, J. G. (1997). Clostridium difficile infection: Pathophysiology and diagnosis. Seminars in Gastrointestinal Disease, 8(1), 12-21.

Bartlett, J.G. (1992). Antibiotic-associated diarrhea. Clinical Infectious Diseases, 15, 573-581.

Bartlett, J.G. (1986). Clostridium difficile: Pseudomembranous colitis and antibiotic-associated diarrhea. In S. L. Gorbach (Ed.), Infectious diarrhea (pp. 157...

...V., Surawicz, C.M., Greenberg, R.N., Elmer, G. W., & Mulligan, M.E. (1997). Recurrent Clostridium difficile diarrhea: Characteristics of and risk factors for patients enrolled in a prospective, randomized, double-blind...

...Infectious Diseases, 24, 324-333.

Fekety, R., & Shah, A.B. (1993). Diagnosis and treatment of Clostridium difficile colitis. Journal of the American Medical Association, 269, 71-75.

Gerding, D.N., Johnson, S., Peterson, L.R., Mulligan, M.E., & Silva, J. (1995). Clostridium difficile-associated diarrhea and colitis. Infection Control and Hospital Epidemiology, 16, 456-477.

Gurevich, I. (1994). Your patients...

...Decazes, J., Lagrange, R, Modal, J., & Molina J. (1997). Prevalence of and risk factors for Clostridium difficile colonization at admission to an infectious diseases ward. Clinical Infectious Diseases, 24, 920-924.

Jackson...

...G. (1996). Gerontologic nursing. St. Louis: Mosby.

Manian, F.A., Meyer, L., & Jenne, J. (1996). Clostridium difficile contamination of blood pressure cuffs: A call for a closer look at gloving practices in A., Larsson, A.J., Rotschafer, J.C., & Guay, D.R.P. (1993). Clostridium difficile colonization in residents of long-term care facilities: Prevalence and risk factors. Journal of the...

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10/3, K/77 (Item 1 from file: 444) Links  
New England Journal of Med.  
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Current Concepts: Clostridium difficile Colitis (Review Articles)

Kelly, Ciaran P.; Pothoulakis, Charalabos; LaMont, J. Thomas.  
The New England Journal of Medicine  
Jan 27, 1994; 330 (4), pp 257-262  
Line Count: 00348 Word Count: 04804

Current Concepts: Clostridium difficile Colitis (Review Articles)

**Text:**

...Clostridium difficile, the agent that causes pseudomembranous colitis associated with antibiotic therapy, has been identified in recent... therapy has made the bowel susceptible to infection, colonization by C. difficile occurs by the oral-fecal route. C. difficile forms heat-resistant spores that persist in the environment for months or years. Infection results from oral ingestion of these spores, which survive the acid environment of the stomach and convert to...agents are available for the management of refractory or recurrent disease (Ref. 8).

**Initial Therapy**

Oral metronidazole (250 mg four times a day) and oral vancomycin (125 mg four times a day) are equally effective in treating diarrhea caused by...disadvantages, metronidazole is preferred because it costs much less than vancomycin (Ref. 40,42). When oral vancomycin is prescribed, many hospital pharmacies economize by using the parenteral solution, since vancomycin capsules are particularly expensive (approximately \$5 per 125-mg dose). Patients who cannot tolerate oral medication because of ileus or recent abdominal surgery can be effectively treated with intravenous metronidazole... of rifampin (Ref. 47) or cholestyramine, (Ref. 48) bacteriotherapy with fecal enemas (Ref. 49) or oral administration of nontoxicogenic C. difficile, (Ref. 50) and treatment with the yeast *Saccharomyces boulardii* (Ref. 51). However, recurrent diarrhea from C. difficile infection has not been thoroughly studied...

**Cited References**

- ...J Med 1978;298:531-4.
- 4. Larson HE, Price AB, Honour P, Borriello SP. Clostridium difficile and the aetiology of pseudomembranous colitis. Lancet 1978;1:1063-6.
- 5. Tedesco F, Markham R, Gurwith M, Christie D, Bartlett JG. Oral vancomycin for antibiotic-associated pseudomembranous colitis. Lancet 1978;2:226-8.
- 6. Keighley MRB, Burdon... BMJ 1978;2:1667-9.
- 7. Borriello SP. The influence of the normal flora on Clostridium difficile colonisation of the gut. Ann Med 1990;22:61-7.
- 8. Kelly CP, LaMont JT. Treatment of Clostridium difficile diarrhea and colitis. In: Wolfe MW, ed. Gastrointestinal pharmacotherapy. Philadelphia: W.B. Saunders, 1993:199... D, Batts DH, Cudmore M, Silva J Jr. Epidemiology of antibiotic-associated colitis: isolation of Clostridium difficile from the hospital environment. Am J Med 1981;70:906-8.
- 12. Kaatz GW, Gitlin SD, Schaberg DR, et al. Acquisition of Clostridium difficile from the hospital environment. Am J Epidemiol 1988;127:1289-94.
- 13. McFarland LV, Mulligan ME, Kwok RYY, Stamm WE. Nosocomial acquisition of Clostridium difficile infection. N Engl J Med 1989;320:204-10.
- 14. Leyerly DM, Krivan HC, Wilkins TD. Clostridium difficile: its disease and toxins. Clin Microbiol Rev 1988;1:1-18.
- 15. Triadafilopoulos G, Pothoulakis C, O'Brien MJ, LaMont JT. Differential effects of Clostridium difficile toxins A and B on rabbit ileum. Gastroenterology

clostridium difficile.txt

1987;93:273-9.

16. Riegler M, Feil W, Hamilton G, et al. *Clostridium difficile* toxin B is more potent than toxin A in damaging human colonic mucosa in vitro. *Gastroenterology* 1993;104:Suppl:A770. abstract.
17. Pothoulakis C, Sullivan R, Melnick DA, et al. *Clostridium difficile* toxin A stimulates intracellular calcium release and chemotactic response in human granulocytes. *J Clin Invest* 1988;81:119-24. TR, LaMont JT, Rothstein TL. Macrophage-dependent stimulation of T cell-depleted spleen cells by *Clostridium difficile* toxin A and calcium ionophore. *Cell Immunol* 1990;126:155-63.
19. Pothoulakis C, LaMont JT, Eglow R, et al. Characterization of rabbit ileal receptors for *Clostridium difficile* toxin A: evidence for a receptor-coupled G protein. *J Clin Invest* 1991;88:119-25.
20. Hecht G, Pothoulakis C, LaMont JT, Madara JL. *Clostridium difficile* toxin A perturbs cytoskeletal structure and tight junction permeability of cultured human intestinal epithelial monolayers. *J Clin Invest* 1977;30:1-12.
22. Larson HE, Barclay FE, Honour P, Hill ID. Epidemiology of *Clostridium difficile* in infants. *J Infect Dis* 1982;146:727-33.
23. Eglow R, Pothoulakis C, Itzkowitz S, et al. Diminished *Clostridium difficile* toxin A sensitivity in newborn rabbit ileum is associated with decreased toxin A receptor. *J Clin Invest* 1983;70:111-116. Laughon BE, Yolken R, et al. Serum antibody response to toxins A and B of *Clostridium difficile*. *J Infect Dis* 1983;148:93-100.
25. Kelly CP, Pothoulakis C, Orellana J, LaMont JT. Human colonic aspirates containing immunoglobulin A antibody to *Clostridium difficile* toxin A inhibit toxin A-receptor binding. *Gastroenterology* 1992;102:35-40.
26. Leung DY, Kelly CP, Boguniewicz M, Pothoulakis C, LaMont JT, Flores A. Treatment with intravenously administered gamma globulin of chronic relapsing colitis induced by *Clostridium difficile* toxin. *J Pediatr* 1991;118:633-7.
27. Johnson S, Clabots CR, Linn FV, Olson MM, Peterson LR, Gerding DN. Nosocomial *Clostridium difficile* colonisation and disease. *Lancet* 1990;336:97-100.
28. Bender BS, Bennett R, Laughon BE, et al. Is *Clostridium difficile* endemic in chronic-care facilities? *Lancet* 1986;2:11-3.
29. Johnson S, Gerding DN, Olson MM, et al. Prospective, controlled study of vinyl glove use to interrupt *Clostridium difficile* nosocomial transmission. *Am J Med* 1990;88:137-40.
30. Brooks SE, Veal RO, Kramer M, Dore L, Schupf N, Adachi M. Reduction in the incidence of *Clostridium difficile* -associated diarrhea in an acute care hospital and a skilled nursing facility following replacement of electronic thermometers... 1990;13:98-103.
31. Johnson S, Homann SR, Bettin KM, et al. Treatment of asymptomatic *Clostridium difficile* carriers (fecal excretors) with vancomycin or metronidazole: a randomized, placebo-controlled trial. *Ann Intern Med* 1992;126:1085-8. PA, Eichelberger K, et al. Multicenter evaluation of a new enzyme immunoassay for detection of *Clostridium difficile* enterotoxin A. *J Clin Microbiol* 1992;30:1085-8.
36. Doern GV, Coughlin RT, Wu L. Laboratory diagnosis of *Clostridium difficile* -associated gastrointestinal disease: comparison of a monoclonal antibody enzyme immunoassay for toxins A and B... cytotoxicity assays. *J Clin Microbiol* 1992;30:2042-6.
37. Tabaqchali S. Epidemiologic markers of *Clostridium difficile*. *Rev ... Conwell* DL, Kraft JA, Kozak KJ, Willis DH. Development of a rapid enzyme immunoassay for *Clostridium difficile* toxin A and its use in the diagnosis of *C. difficile*-associated disease. *J Clin Microbiol* 1991;31:39. Lyerly DM, Barroso LA, Wilkins TD. Identification of the latex test-reactive protein of *Clostridium difficile* as glutamate dehydrogenase. *J Clin Microbiol* 1991;29:2639-42.
40. Teasley DG, Gerding DN, Olson MM, et al. Prospective randomised trial of metronidazole versus vancomycin for *Clostridium difficile*-associated diarrhoea and colitis. *Lancet* 1983;2:1043-6.
41. Peterson LR, Gerding DN. Antimicrobial agents in *Clostridium difficile*-associated intestinal diseases. In: Rambaud J-C, Ducluzeau R, eds. *Clostridium difficile et pathologie intestinale: Clostridium difficile-associated intestinal diseases*. Paris: Springer-Verlag, 1990:115-27.
42. Briceland LL, Quintiliani R, Nightingale CH. Multidisciplinary cost-containment program promoting oral metronidazole for treatment of antibiotic-associated colitis. *Am J Hosp Pharm* 1988;45:122-5.

clostrdifficile.txt

43. Bolton RP, Culshaw MA. Faecal metronidazole concentrations during oral and intravenous therapy for antibiotic associated colitis due to *Clostridium difficile*. Gut 1986;27:1169-72.
44. Kleinfeld DI, Sharpe RJ, Donta ST. Parenteral therapy for... 1985;80:867-8.
47. Buggy BP, Fekety R, Silva J Jr. Therapy of relapsing *Clostridium difficile*-associated diarrhea and colitis with the combination of vancomycin and rifampin. J Clin Gastroenterol 1987;9:155....Gastroenterol 1982;77:220-1.
49. Tvede M, Rask-Madsen J. Bacteriotherapy for chronic relapsing *Clostridium difficile* diarrhoea in six patients. Lancet 1989;1:1156-60.
50. Seal D, Borriello SP, Barclay F, Welch A, Piper M, Bonnycastle M. Treatment of relapsing *Clostridium difficile* diarrhoea by administration of a non-toxigenic strain. Eur J Clin Microbiol 1987;6:51-3.
51. Surawicz CM, McFarland LV, Elmer G, Chinn J. Treatment of recurrent *Clostridium difficile* colitis with vancomycin and *Saccharomyces boulardii*. Am J Gastroenterol 1989;84:1285-7. □

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Recent Developments In The Understanding Of The Pathogenesis And Treatment Of Anaerobic Infections (first of Two Parts) (Medical Progress)

Styrt, Barbara; Gorbach, Sherwood L.  
The New England Journal of Medicine  
Jul 27 , 1989 ; 321 (4), pp 240-246  
Line Count: 00371 Word Count: 05126

Text:

...pathogenesis, as well as other newly discovered monomicrobial infections, such as pseudomembranous colitis due to *Clostridium difficile* and actinomycosis associated with the use of an intrauterine device. \*Table 1. Principal Types of... ...in the normal flora and those most frequently isolated during infections. For example, *veillonella*, *eubacterium*, *bifidobacterium*, and *lactobacillus* are abundant in normal colonic flora but associated only rarely with intraabdominal infections (Ref. 6...infections in patients with neutropenia and cancer through the selective suppression of aerobic flora with oral antibiotics (Ref. 37). A suppressive role of volatile fatty acids produced by anaerobic commensals has...of the inciting antibiotic, specific antimicrobial therapy against *C. difficile* has proved useful, originally with oral vancomycin, (Ref. 111) more recently with metronidazole, (Ref. 112) and in a small number of...

Cited References

- ...11):1-97.
6. Bourne KA, Beebe JL, Lue YA, Ellner PD. Bacteremia due to *Bifidobacterium*, *Eubacterium* or *Lactobacillus*. Yale J Biol Med 1978; 51:505-12.
7. Eng RH, Suwanagool S, Chmel H... ...427-53.
13. Taylor NS, Bartlett JG. Partial purification and characterization of a cytotoxin from *Clostridium difficile*. Rev Infect Dis 1979; 1:379-85.
14. Banno Y, Kobayashi T, Kono H, Watanabe....Y. Biochemical characterization and biologic actions of two toxins (D-1 and D-2) from *Clostridium difficile*. Rev Infect Dis 1984; 6:Suppl 1:S11-S20.
15. Sveen K. Rabbit polymorphonuclear leukocyte... ...Dolegeal M, Fourniat J, Mahuzier G. Role of volatile fatty acids in colonization resistance to *Clostridium difficile* in gnotobiotic mice. Infect Immun 1987; 55:1686-91.
39. Wells CL, Maddaus MA, Reynolds...11:337-42.
63. Dailey DC, Kaiser A, Schloemer RH. Factors influencing the phagocytosis of *Clostridium difficile* by human polymorphonuclear leukocytes. Infect Immun 1987;

clostridifficile.txt

55:1541-6.

64. Ingham HR, Sisson PR... Am J Clin Pathol 1986; 86:97-101.

73. Lea AS, Feliciano DV, Gentry LO. Intra-abdominal infections: an update. J Antimicrob Chemother 1982; 9:Suppl A:107-13.

74. Onderdonk AB, Bartlett JG, Louie T, Sullivan-Siegler N, Gorbach SL. Microbial synergy in experimental intra-abdominal abscess. Infect Immun 1976; 13:22-6.

76. Brook I. Enhancement of growth of...associated colitis. Dis Mon 1984; 30 (15):1-54.

100. Finegold SM. Anaerobic infections and *Clostridium difficile* colitis emerging during antibacterial therapy. Scand J Infect Dis Suppl 1986; 49:160-4.

101. Gerdin DN, Olson MM, Peterson LR, et al. *Clostridium difficile*-associated diarrhea and colitis in adults: a prospective case-controlled epidemiologic study. Arch Intern Med 1986; 146:100.

102. Talbot RW, Walker RC, Beart RW Jr. Changing epidemiology, diagnosis, and treatment of *Clostridium difficile* toxin-associated colitis. Br J Surg 1986; 73:457-60.

103. Silva J, Fekety R... 1984; 6:Suppl 1:S214-S221.

104. Panichi G, Pantosti A, Gentile G, et al. *Clostridium difficile* colitis in leukemia patients. Eur J Cancer Clin Oncol 1985; 21:1159-63.

105. Drapkin MS, Worthington MG, Chang TW, Razvi SA. *Clostridium difficile* colitis mimicking acute peritonitis. Arch Surg 1985; 120:1321-2.

106. Mulligan ME. Epidemiology of *Clostridium difficile*-induced intestinal disease. Rev Infect Dis 1984; 6:Suppl 1:S222-S228.

107. Clabots CR, Peterson LR, Gerdin DN. Characterization of a nosocomial *Clostridium difficile* outbreak by using plasmid profile typing and clindamycin susceptibility testing. J Infect Dis 1988; 158:731-6.

108. McFarland LV, Mulligan ME, Kwok RYY, Stamm WE. Nosocomial acquisition of *Clostridium difficile* infection. N Engl J Med 1989; 320:204-10.

109. Gerdin DN. Disease associated with *Clostridium difficile* infection. Ann Intern Med 1989; 110:255-7.

110. Johnson S, Adelmann A, Clabots CR, Peterson LR, Gerdin DN. Recurrences of *Clostridium difficile* diarrhea not caused by the original infecting organism. J Infect Dis 1989; 159:340-3... S235-S241.

113. Dudley MN, McLaughlin JC, Carrington G, Frick J, Nightingale CH, Quintiliani R. Oral bacitracin vs. vancomycin therapy for *Clostridium difficile*-induced diarrhea: a randomized double-blind trial. Arch Intern Med 1986; 146:1101-4.

114. Wilkins TD. Purification and characterization of *Clostridium sordellii* hemorrhagic toxin and cross-reactivity with *Clostridium difficile* toxin A (enterotoxin). Infect Immun 1988; 56:1215-21.

115. Mitchell TJ, Ketley JM, Burdon DW, Candy DC, Stephen J. The effects of *Clostridium difficile* crude toxins and purified toxin A on stripped rabbit ileal mucosa in Ussing chambers. J... Mitchell TJ, Ketley JM, Burdon DW, Candy DC, Stephen J. Biological mode of action of *Clostridium difficile* toxin A: a novel enterotoxin. J Med Microbiol 1987; 23:211-9.

117. Pothoulakis C, Barone LM, Ely R, et al. Purification and properties of *Clostridium difficile* cytotoxin B. J Biol Chem 1986; 261:1316-21.

118. Pothoulakis C, Sullivan R, Melnick D, Gadenne AS, Meshulam T, LaMont JT. *Clostridium difficile* toxins A and B stimulate intracellular calcium release in human neutrophils. Clin Res 1986; 34... abstract.

119. Mitchell TJ, Ketley JM, Burdon DW, Candy DC, Stephen J. The effects of *Clostridium difficile* toxins A and B on membrane integrity and protein synthesis in intestinal cells in vivo... 23:205-10.

120. Kim PH, Iaconis JP, Rolfe RD. Immunization of adult hamsters against *Clostridium difficile*-associated ileocectitis and transfer of protection to infant hamsters. Infect Immun 1987; 55:2984-92...

Set	Items	Description
S1	38917	S CLOSTRIDIUM(W)DIFFICILE
S2	38917	S S1 OR CLOSTRIDIUM(W)DIFFICILE(W)ASSOCIATED(W)DIARRHEA

clostrdifficile.txt

S3 1086 S S2 AND PROBIOTIC  
S4 9928 S S2 AND (PROBIOTIC OR YOGURT OR (DIETARY(W)SUPPLEMENT) OR LACTOBAC?  
OR BIFIDOBACTER? OR SACCHAROMYCES OR ENTEROCOCC? OR EUBACTERIA)  
S5 742 S S4 AND (IMMUNOGLOBULIN OR ANTIBODY OR ANTIBODIES OR MONOCLONAL OR  
POLYCLONAL)  
S6 991 S S4 AND ((CLOSTRIDIUM(W)DIFFICILE(W)TOXIN(W)A) OR  
(CLOSTRIDIUM(W)DIFFICILE(W)TOXIN(W)B))  
S7 139 S S6 AND (ADMINIS? OR INTRA OR ORAL)  
S8 128 RD (unique items)  
S9 78 S S8 NOT PY>=2003  
S10 78 RD (unique items)

? s (CLOSTRIDIUM(W)DIFFICILE(W)TOXIN(W)A) OR (CLOSTRIDIUM(W)DIFFICILE(W)TOXIN(W)B)  
or clostridium(w)difficile(w)outer(w)membrane protein

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

209383 CLOSTRIDIUM  
66204 DIFFICILE  
872238 TOXIN  
97790705 A  
3468 CLOSTRIDIUM(W)DIFFICILE(W)TOXIN(W)A  
209383 CLOSTRIDIUM  
66204 DIFFICILE  
872238 TOXIN  
9572638 B  
2305 CLOSTRIDIUM(W)DIFFICILE(W)TOXIN(W)B  
209383 CLOSTRIDIUM  
66204 DIFFICILE  
703273 OUTER  
61035 MEMBRANE PROTEIN  
0 CLOSTRIDIUM(W)DIFFICILE(W)OUTER(W)MEMBRANE PROTEIN

S11 5244 S (CLOSTRIDIUM(W)DIFFICILE(W)TOXIN(W)A) OR  
(CLOSTRIDIUM(W)DIFFICILE(W)TOXIN(W)B) OR CLOSTRIDIUM(W)DIFFICILE(W)OUTER(W)MEMBRANE  
PROTEIN

? s s1 and ((toxin(w)A) or (toxin(w)B) or (outermembrane(w)protein))

Processing

clostrdifficile.txt

Processing

38917	S1
872238	TOXIN
97790705	A
42538	TOXIN(w)A
872238	TOXIN
9572638	B
26386	TOXIN(w)B
277	OUTERMEMBRANE
13201000	PROTEIN
79	OUTERMEMBRANE(w) PROTEIN
S12 9043	S S1 AND ((TOXIN(w)A) OR (TOXIN(w)B) OR (OUTERMEMBRANE(w) PROTEIN))

? d s

Set	Items	Description
S1	38917	S CLOSTRIDIUM(w)DIFFICILE
S2	38917	S S1 OR CLOSTRIDIUM(w)DIFFICILE(w)ASSOCIATED(w)DIARRHEA
S3	1086	S S2 AND PROBIOTIC
S4	9928	S S2 AND (PROBIOTIC OR YOGURT OR (DIETARY(w)SUPPLEMENT) OR LACTOBAC?
		OR BIFIDOBACTER? OR SACCHAROMYCES OR ENTEROCOCC? OR EUBACTERIA)
S5	742	S S4 AND (IMMUNOGLOBULIN OR ANTIBODY OR ANTIBODIES OR MONOCLONAL OR POLYCLONAL)
S6	991	S S4 AND ((CLOSTRIDIUM(w)DIFFICILE(w)TOXIN(w)A) OR (CLOSTRIDIUM(w)DIFFICILE(w)TOXIN(w)B))
S7	139	S S6 AND (ADMINIS? OR INTRA OR ORAL)
S8	128	RD (unique items)
S9	78	S S8 NOT PY>=2003
S10	78	RD (unique items)
S11	5244	S (CLOSTRIDIUM(w)DIFFICILE(w)TOXIN(w)A) OR (CLOSTRIDIUM(w)DIFFICILE(w)TOXIN(w)B) OR CLOSTRIDIUM(w)DIFFICILE(w)OUTER(w)MEMBRANE PROTEIN
S12	9043	S S1 AND ((TOXIN(w)A) OR (TOXIN(w)B) OR (OUTERMEMBRANE(w) PROTEIN))

? s s12 and s2

9043	S12
38917	S2
S13 9043	S S12 AND S2

? s s13 and (PROBIOTIC OR YOGURT OR (DIETARY(w)SUPPLEMENT) OR LACTOBAC? OR BIFIDOBACTER? OR SACCHAROMYCES OR ENTEROCOCC? OR EUBACTERIA)

Processing

9043	S13
40013	PROBIOTIC
31995	YOGURT
1323419	DIETARY
328900	SUPPLEMENT
45360	DIETARY(w)SUPPLEMENT
185228	LACTOBAC?
38488	BIFIDOBACTER?
615220	SACCHAROMYCES
131947	ENTEROCOCC?
1530098	EUBACTERIA
S14 1886	S S13 AND (PROBIOTIC OR YOGURT OR (DIETARY(w)SUPPLEMENT) OR LACTOBAC? OR BIFIDOBACTER? OR SACCHAROMYCES OR ENTEROCOCC? OR EUBACTERIA))

?

? s s14 and (ADMINIS? OR INTRA OR ORAL)

Processing

Processing

1886	S14
7963115	ADMINIS?
759454	INTRA
2812203	ORAL

clostrdifficile.txt

S15 267 S S14 AND (ADMINIS? OR INTRA OR ORAL)

? rd  
 >>>W: Duplicate detection is not supported for File 393.  
 Duplicate detection is not supported for File 391.  
 Records from unsupported files will be retained in the RD set.

S16 219 RD (UNIQUE ITEMS)

? d s

Set	Items	Description
S1	38917	S CLOSTRIDIUM(W)DIFFICILE
S2	38917	S S1 OR CLOSTRIDIUM(W)DIFFICILE(W)ASSOCIATED(W)DIARRHEA
S3	1086	S S2 AND PROBIOTIC
S4	9928	S S2 AND (PROBIOTIC OR YOGURT OR (DIETARY(W)SUPPLEMENT) OR LACTOBAC? OR BIFIDOBACTER? OR SACCHAROMYCES OR ENTEROCOCC? OR EUBACTERIA)
S5	742	S S4 AND (IMMUNOGLOBULIN OR ANTIBODY OR ANTIBODIES OR MONOCLONAL OR POLYCLONAL)
S6	991	S S4 AND ((CLOSTRIDIUM(W)DIFFICILE(W)TOXIN(W)A) OR (CLOSTRIDIUM(W)DIFFICILE(W)TOXIN(W)B))
S7	139	S S6 AND (ADMINIS? OR INTRA OR ORAL)
S8	128	RD (unique items)
S9	78	S S8 NOT PY>=2003
S10	78	RD (unique items)
S11	5244	S (CLOSTRIDIUM(W)DIFFICILE(W)TOXIN(W)A) OR (CLOSTRIDIUM(W)DIFFICILE(W)TOXIN(W)B) OR CLOSTRIDIUM(W)DIFFICILE(W)OUTER(W)MEMBRANE PROTEIN
S12	9043	S S1 AND ((TOXIN(W)A) OR (TOXIN(W)B) OR (OUTERMEMBRANE(W)PROTEIN))
S13	9043	S S12 AND S2
S14	1886	S S13 AND (PROBIOTIC OR YOGURT OR (DIETARY(W)SUPPLEMENT) OR LACTOBAC? OR BIFIDOBACTER? OR SACCHAROMYCES OR ENTEROCOCC? OR EUBACTERIA)
S15	267	S S14 AND (ADMINIS? OR INTRA OR ORAL)
S16	219	RD (unique items)

? s s12 and (PROBIOTIC OR YOGURT OR (DIETARY(W)SUPPLEMENT) or milk)

9043	S12
40013	PROBIOTIC
31995	YOGURT
1323419	DIETARY
328900	SUPPLEMENT
45360	DIETARY(W)SUPPLEMENT
1019077	MILK

S17 224 S S12 AND (PROBIOTIC OR YOGURT OR (DIETARY(W)SUPPLEMENT) OR MILK)

? s s17 and (ADMINIS? OR INTRA OR ORAL)

Processing

224	S17
7963115	ADMINIS?
759454	INTRA
2812203	ORAL

S18 65 S S17 AND (ADMINIS? OR INTRA OR ORAL)

? t s18/3,k/1-65  
 >>>W: KWIC option is not available in file(s): 399  
 18/3,K/1 (Item 1 from file: 5) Links  
 Fulltext available through: STIC Full Text Retrieval Options  
 Biosis Previews(R)  
 (c) 2008 The Thomson Corporation. All rights reserved.  
 18507410 Biosis No.: 200510201910  
 The potential role of combined antibiotic and probiotic therapy.

Author: Plummer S (Reprint); Cottrell S L; Weaver M A; Garaiova I; Sarvotham T; Tang J; Dee P; Hunter J  
 Journal: Abstracts of the Interscience Conference on Antimicrobial Agents and  
 Page 56

**clostridium difficile.txt**

Chemotherapy 44 p 320 OCT-NOV 2004 2004

Conference/Meeting: 44th Interscience Conference on Antimicrobial Agents and Chemotherapy Washington, DC, USA October 30 -November 02, 2004; 20041030

ISSN: 0733-6373

Document Type: Meeting; Meeting Poster

Record Type: Citation

Language: English

The potential role of combined antibiotic and probiotic therapy.

**DESCRIPTORS:**

Organisms: ...Clostridium difficile (Endospore-forming Gram-Positives

Organisms: Parts Etc:

Diseases: ...Clostridium difficile infection

Mesh Terms:

Chemicals & Biochemicals: ...toxin A--... ...toxin B--... ...antibacterial-drug, antiinfective-drug, oral administration; ... ...antibacterial-drug, antiinfective-drug, oral administration

18/3,K/2 (Item 2 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options  
Biosis Previews(R)

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18432562 Biosis No.: 200510127062

Tylosin-responsive chronic diarrhea in dogs

Author: Westermarck Elias (Reprint); Skrzypczak Teresa; Harmoinen Jaana; Steiner Jorg M; Ruaux Craig G; Williams David A; Eerola Erkki; Sundback Pernilla; Rinkinen Minna

Author Address: Univ Helsinki, Fac Med Vet, Dept Vet Clin Sci, POB 57, FIN-00014 Helsinki, Finland\*\*Finland

Author E-mail Address: elias.westermarck@helsinki.fi

Journal: Journal of Veterinary Internal Medicine 19 ( 2 ): p 177-186 MAR-APR05 2005

ISSN: 0891-6640

Document Type: Article

Record Type: Abstract

Language: English

Abstract: ...diarrhea in all dogs within 3 days and in most dogs within 24 hours.

Tylosin administration controlled diarrhea in all dogs, but after it was discontinued, diarrhea reappeared in 12 (85... ...14 dogs within 30 days. Prednisone given for 3 days did not completely resolve diarrhea. Probiotic *Lactobacillus rhamnosus* GG did not prevent the relapse of diarrhea in any of 9 dogs... ...bacteria (*Salmonella* spp., *Campylobacter* spp., *Yersinia* spp., or *Lawsonia intracellularis*), and *Clostridium perfringens* enterotoxin and *Clostridium difficile* A toxin. A possible etiologic factor is a specific enteropathogenic organism that is a common resident in the...

**DESCRIPTORS:**

Organisms: ...Clostridium difficile (Endospore-forming Gram-Positives

Organisms: Parts Etc:

Chemicals & Biochemicals: Clostridium difficile toxin A;

18/3,K/3 (Item 3 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options  
Biosis Previews(R)

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14655522 Biosis No.: 199800449769

Clostridium difficile infection. Current problems

Author: Fulgione Vito (Reprint)

Author Address: Via Fara Sabina 1, 00199 Roma, Italy\*\*Italy

Journal: Recenti Progressi in Medicina 89 ( 7-8 ): p 385-394 July-Aug., 1998 1998  
Medium: print  
ISSN: 0034-1193  
Document Type: Article; Literature Review  
Record Type: Abstract  
Language: Italian  
Clostridium difficile infection. Current problems

Abstract: Clostridium difficile is a gram-positive anaerobe that forms subterminal spores. It is now one of major... ...the natural microflora has been modified by antibiotic therapy. Toxigenic strains of *C. difficile* produce toxin A (enterotoxin) or toxin B (citotoxin) or both which cause the cytotoxic effect "rounding". *C. difficile* can spread from patient... ...diarrhea (antibiotic associated diarrhea) to fatal pseudomembranous colitis (PMC). The current therapy is based on oral administration of metronidazole or vancomycin. In patients non responders or that continue to relapse can be used other forms of therapy: antibiotic (teicoplanine, bacitracine, rifamixine); anion exchange resin (colestipol, colestiramine); probiotic therapy (*S. boulardii*, *Lactobacilli* and fecal enemas). New and improved studies will lead to new ...

DESCRIPTORS:

Organisms: ...probiotic; ... ...Clostridium-difficile (Endospore-forming

Gram-Positives... ...probiotic

Organisms: Parts Etc:

Diseases: ...Clostridium difficile infection

Mesh Terms:

18/3,K/4 (Item 1 from file: 34) Links

Fulltext available through: STIC Full Text Retrieval Options

SciSearch(R) Cited Ref Sci

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16363361 Genuine Article#: 156AC No. References: 32

The safety of whey protein concentrate derived from the milk of cows immunized against Clostridium difficile

Author: Young KWH (REPRINT) ; Munro IC; Taylor SL; Veldkamp P; van Dissel JT  
Corporate Source: Cantox Hlth Sci Int,2233 Argentina Rd,Suite 308/Mississauga/ON L5N 2X7/Canada/ (REPRINT); Cantox Hlth Sci Int,Mississauga/ON L5N 2X7/Canada/; Univ Nebraska,Dept Food Sci & Technol,Lincoln//NE/68583; Univ Pittsburgh,Med Ctr, Div Infect Dis,Pittsburgh//PA/15213; Leiden Univ,Med Ctr, Dept Infect Dis,NL-2333 ZA Leiden//Netherlands/

Journal: REGULATORY TOXICOLOGY AND PHARMACOLOGY , 2007 , V 47 , N3 ( APR ) , P 317-326

ISSN: 0273-2300 Publication date: 20070400

Publisher: ACADEMIC PRESS INC ELSEVIER SCIENCE , 525 B ST, STE 1900, SAN DIEGO, CA 92101-4495 USA

Language: English Document Type: ARTICLE ( ABSTRACT AVAILABLE )

The safety of whey protein concentrate derived from the milk of cows immunized against Clostridium difficile

Abstract: A whey protein concentrate prepared from the milk of cows that have been immunized against Clostridium difficile (*C. difficile*) and its toxins toxin A and toxin B, is produced for use as a medical food for the dietary management of patients with... ...protein concentrate (anti-CD WPC) is supported by analytical data comparing the composition of raw milk from immunized cows versus that from non-immunized cows, and the composition of anti-CD...

Identifiers-- ...QUALITY-OF-LIFE; ESCHERICHIA-COLI; IMMUNOGLOBULIN-A; HYPERIMMUNIZED COWS; ORAL CHALLENGE; DIARRHEA; ANTIBODIES; INFECTION; INFANTS

18/3,K/5 (Item 2 from file: 34) Links

Fulltext available through: STIC Full Text Retrieval Options

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SciSearch(R) Cited Ref Sci

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13787361 Genuine Article#: 909TC No. References: 39

Tylosin-responsive chronic diarrhea in dogs

Author: Westermarck E (REPRINT) ; Skrzypczak T; Harmoinen J; Steiner JM; Ruaux CG; Williams DA; Eerola E; Sundback P; Rinkinen M

Corporate Source: Univ Helsinki, Fac Med Vet, Dept Vet Clin Sci, POB 57/FIN-00014

Helsinki//Finland/ (REPRINT); Univ Helsinki, Fac Med Vet, Dept Vet Clin Sci, FIN-00014

Helsinki//Finland/; Natl Vet & Food Res Inst, Helsinki//Finland/; Texas A&M

Univ, Gastrointestinal Lab, College Stn//TX/; Univ Turku, Dept Med

Microbiol, Turku//Finland/; Univ Helsinki, Fac Med Vet, Dept Vet Basic Sci, FIN-00014

Helsinki//Finland/ (elias.westermarck@helsinki.fi)

Journal: JOURNAL OF VETERINARY INTERNAL MEDICINE , 2005 , v 19 , N2 ( MAR-APR ) , p 177-186

ISSN: 0891-6640 Publication date: 20050300

Publisher: AMER COLL VETERINARY INTERNAL MEDICINE , 7175 W JEFFERSON AVE, STE 2125, LAKEWOOD, CO 80235 USA

Language: English Document Type: ARTICLE ( ABSTRACT AVAILABLE )

Abstract: ...diarrhea in all dogs within 3 days and in most dogs within 24 hours.

Tylosin administration controlled diarrhea in all dogs, but after it was discontinued, diarrhea reappeared in 12 (85... 14 dogs within 30 days. Prednisone given for 3 days did not completely resolve diarrhea. Probiotic Lactobacillus rhamnosus GG did not prevent the relapse of diarrhea in any of 9 dogs....bacteria (Salmonella spp., Campylobacter spp., Yersinia spp., or Lawsonia intracellularis), and Clostridium perfringens enterotoxin and Clostridium difficile A toxin. A possible etiologic factor is a specific enteropathogenic organism that is a common resident in the...

Identifiers--

18/3,K/6 (Item 3 from file: 34) Links

Fulltext available through: STIC Full Text Retrieval Options

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12319152 Genuine Article#: 747LB No. References: 13

Fungemia after oral treatment with Saccharomyces boulardii in a patient with multiple co-morbidities

Author: Lestin F (REPRINT) ; Pertschy A; Rimek D

Corporate Source: Univ Rostock, Inst Med Mikrobiol Virol & Hyg, Abt Med Mikrobiol & Krankenhausthyg, Schillingallee 70/D-18057 Rostock//Germany/ (REPRINT); Univ Rostock, Inst Med Mikrobiol Virol & Hyg, Abt Med Mikrobiol & Krankenhausthyg, D-18057 Rostock//Germany/; Univ Rostock, Chirurg Klin & Poliklin, D-2500 Rostock 1//Germany/; Thuringer Landesamt Lebensmittels & Verbrauchersc, Erfurt//Germany/

Journal: DEUTSCHE MEDIZINISCHE WOCHENSCHRIFT , 2003 , v 128 , N48 ( NOV 28 ) , p 2531-2533

ISSN: 0012-0472 Publication date: 20031128

Publisher: GEORG THIEME VERLAG KG , RUDIGERSTR 14, D-70469 STUTTGART, GERMANY

Language: German Document Type: ARTICLE ( ABSTRACT AVAILABLE )

Fungemia after oral treatment with Saccharomyces boulardii in a patient with multiple co-morbidities

Abstract: ...and follow up: After receiving different broad-spectrum antibiotics over seven weeks the patient developed Clostridium difficile toxin-positive diarrhea that resolved after administration of oral metronidazole and Saccharomyces boulardii (Perenteroll(R)). Three days after bypass insertion, both legs had to... to multi-organ failure.

Conclusion: *S. boulardii* (synonym: *S. cerevisiae*) is considered an non-pathogenic probiotic yeast, and live yeast cells are used for supportive therapy of diarrhea. The present case... a review of the literature demonstrate that fungemia and sepsis are rare complications of the administration of *S. boulardii* in

clostridifficile.txt

immunocompromised patients. For this reason the therapeutic usage of probiotics should...

Identifiers-- ...ANTIBIOTIC-ASSOCIATED DIARRHEA; DIFFICILE TOXIN-A; PREVENTION; CEREVISIAE; VANCOMYCIN

18/3,K/7 (Item 4 from file: 34) Links

Fulltext available through: STIC Full Text Retrieval Options  
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07388912 Genuine Article#: 159NW No. References: 31

Bovine immunoglobulin concentrate Clostridium difficile retains C-difficile toxin neutralising activity after passage through the human stomach and small intestine

Author: Warny M; Fatimi A; Bostwick EF; Laine DC; Lebel F; LaMont JT; Pothoulakis C ; Kelly CP (REPRINT)

Corporate Source: HARVARD UNIV,SCH MED, DIV GASTROENTEROL, BETH ISRAEL DEACONESS MED CTR, DANA 601, 330 BR/BOSTON//MA/02115 (REPRINT); HARVARD UNIV,SCH MED, DIV GASTROENTEROL, BETH ISRAEL DEACONESS MED CTR/BOSTON//MA/02115; GALAGEN INC,/ARDEN HILLS//MN/

Journal: GUT , 1999 , v 44 , n2 ( FEB ) , p 212-217

ISSN: 0017-5749 Publication date: 19990200

Publisher: BRITISH MED JOURNAL PUBL GROUP , BRITISH MED ASSOC HOUSE, TAVISTOCK SQUARE, LONDON WC1H 9JR, ENGLAND

Language: English Document Type: ARTICLE ( ABSTRACT AVAILABLE )

Bovine immunoglobulin concentrate Clostridium difficile retains C-difficile toxin neutralising activity after passage through the human stomach and small intestine

Abstract: Background-Bovine immunoglobulin concentrate (BIC)-Clostridium difficile is prepared from the colostrum of cows immunised against C difficile toxins and contains high....ileum transit times (68% versus 36%, p<0.05). Specific bovine IgE against C difficile toxin A was detected in ileal fluid following oral BIG. Toxin neutralising activity was also present and correlated closely with bovine IgG levels (r... ...C difficile resists digestion in the human upper gastrointestinal tract and specific anti-C difficile toxin A binding and neutralising activity was retained. Passive oral immunotherapy with anti-C difficile BIC may be a useful non-antibiotic approach to the...

Identifiers-- ...ESCHERICHIA-COLI; MILK IMMUNOGLOBULINS; PASSIVE-IMMUNIZATION; ANTIBODY-RESPONSE; RHO-PROTEINS; HAMSTERS; DIARRHEA; COLOSTRUM; GASTROENTERITIS; PROTECTION

18/3,K/8 (Item 5 from file: 34) Links

Fulltext available through: STIC Full Text Retrieval Options  
SciSearch(R) Cited Ref Sci

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04323483 Genuine Article#: RV536 No. References: 37

LONG-TERM INGESTION OF LACTOSUCROSE INCREASES BIFIDOBACTERIUM SP IN HUMAN FECAL FLORA

Author: OHKUSA T; OZAKI Y; SATO C; MIKUNI K; IKEDA H

Corporate Source: TOKYO MED & DENT UNIV,SCH MED,DEPT INTERNAL MED1,BUNKYO KU,YUSHIMA 1-5/TOKYO 113//JAPAN/

Journal: DIGESTION , 1995 , v 56 , n5 ( SEP-OCT ) , p 415-420

ISSN: 0012-2823

Language: ENGLISH Document Type: ARTICLE ( Abstract Available )

Abstract: ...8 weeks. Fecal microflora, bacterial metabolites, pH, and moisture were analyzed before and after the administration of lactosucrose. The results showed that the number and percentage of Bifidobacterium sp. in relation to the total bacteria significantly increased during the period of lactosucrose administration. Although fecal putrefactive products, fatty acids, pH, moisture content, and stool volume did not show... ...number of Bifidobacterium sp. Fecal ammonia significantly decreased after 4 and 8 weeks of lactosucrose administration, and 1 week after the

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end of lactosucrose administration, compared with results after a 1-week administration of lactosucrose. When the administration was stopped, the percentage of *Bifidobacterium* sp. in relation to the total count gradually decreased to the same level as before the administration of lactosucrose. These results suggest that under physiological conditions, lactosucrose acts on the intestinal microflora...

Identifiers-- ...FERMENTED MILK; COLONIZATION RESISTANCE; BACTERIA

Research Fronts: 93-2333 003 (FECAL FLORA; TRANSGALACTOSYLATED OLIGOSACCHARIDES;

CECAL MUCOSA)

93-1901 001 (CLOSTRIDIUM-DIFFICILE TOXIN-A; ACUTE DIARRHEA; MCCOY CELL ASSAY)

93-4511 001 (INTESTINAL MICROFLORA; BACTERIAL FECAL FLORA; PIG MODEL...)

Cited References:

18/3,K/9 (Item 6 from file: 34) Links

Fulltext available through: STIC Full Text Retrieval Options

SciSearch(R) Cited Ref Sci

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03358784 Genuine Article#: NZ047 No. References: 133

UPDATE ON CLOSTRIDIUM DIFFICILE-INDUCED COLITIS .1.

Author: REINKE CM; MESSICK CR

Corporate Source: AUBURN UNIV,SCH PHARM,DEPT CLIN PHARM PRACTICE,308 PHARM

BLDG/AUBURN//AL/36849; E ALABAMA MED CTR/OPELIKA//AL/00000; UNIV N CAROLINA

HOSP/CHAPEL HILL//NC/00000

Journal: AMERICAN JOURNAL OF HOSPITAL PHARMACY , 1994 , v 51 , N14 ( JUL 15 ) , p 1771-1781

ISSN: 0002-9289

Language: ENGLISH Document Type: REVIEW ( Abstract Available )

UPDATE ON CLOSTRIDIUM DIFFICILE-INDUCED COLITIS .1.

Abstract: Recent findings on the epidemiology, pathogenesis, clinical manifestations, diagnosis, and treatment of *Clostridium difficile*-induced colitis (CDIC) are discussed.

CDIC is a gastrointestinal disorder that results from colonization by and overgrowth of *C. difficile*. Among patients in the community who are treated with an oral antimicrobial, only 1 to 3 individuals per 100,000 develop CDIC, compared with as many.... a period of watchful waiting may be advisable in mild cases. When treatment is necessary, oral metronidazole is the agent of choice in all but the most severe cases. Whether oral metronidazole is therapeutically equivalent to oral vancomycin in severe CDIC is controversial. Regardless of the antimicrobial used, some patients suffer a ...

Identifiers--

Research Fronts: 92-1932 003 (CLOSTRIDIUM-DIFFICILE TOXIN-A; ANTIBIOTIC-ASSOCIATED FULMINANT PSEUDOMEMBRANOUS COLITIS; ACUTE INFECTIVE DIARRHEA)

92-0825 001 (INVITRO ACTIVITY OF TEMAFLOXACIN; METHICILLIN-RESISTANT STAPHYLOCOCCUS-AUREUS; QUINOLONE ANTIMICROBIAL AGENTS)

92-4482 001 (SECRETORY ANTIBODIES; MOTHERS MILK; FECAL LACTOFERRIN; BREAST-FED INFANTS LIMIT GASTROENTERITIS)

Cited References:

18/3,K/10 (Item 7 from file: 34) Links

Fulltext available through: STIC Full Text Retrieval Options

SciSearch(R) Cited Ref Sci

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02153296 Genuine Article#: KF249 No. References: 39

ADMINISTRATION OF DIFFERENT LACTOBACILLUS STRAINS IN FERMENTED OATMEAL SOUP - INVIVO COLONIZATION OF HUMAN INTESTINAL-MUCOSA AND EFFECT ON THE INDIGENOUS FLORA

Author: JOHANSSON ML; MOLIN G; JEPPISSON B; NOBAEK S; AHRNE S; BENGMARK S

Corporate Source: UNIV LUND,DEPT FOOD TECHNOL,FOOD HYG LAB,POB 124/S-22100

LUND//SWEDEN/; UNIV LUND,DEPT FOOD TECHNOL,FOOD HYG LAB,POB 124/S-22100

*clostridifficile.txt*

LUND//SWEDEN/; UNIV LUND,DEPT SURG/S-22185 LUND//SWEDEN/  
Journal: APPLIED AND ENVIRONMENTAL MICROBIOLOGY , 1993 , V 59 , N1 ( JAN ) , P 15-20

ISSN: 0099-2240

Language: ENGLISH Document Type: ARTICLE ( Abstract Available )

ADMINISTRATION OF DIFFERENT LACTOBACILLUS STRAINS IN FERMENTED OATMEAL SOUP - INVIVO  
COLONIZATION OF HUMAN INTESTINAL-MUCOSA AND...

**Abstract:** ...on human intestinal mucosa of healthy volunteers was studied together with the effect of Lactobacillus administration on different groups of indigenous bacteria. A total of 19 test strains were administered in fermented oatmeal soup containing  $5 \times 10^6$  CFU of each strain per ml... days. Biopsies were taken from both the upper jejunum and the rectum 1 day before administration was started and 1 and 11 days after administration was terminated. The administration significantly increased the Lactobacillus counts on the jejunum mucosa, and high levels remained 11 days after administration was terminated. The levels of streptococci increased by 10- to 100-fold in two persons... jejunum decreased by 10- to 100-fold in three of the volunteers 1 day after administration was terminated. In recta, the anaerobic bacterium counts and the gram-negative anaerobic bacterium counts decreased significantly by the end of administration. Furthermore, a decrease in the number of members of the Enterobacteriaceae by 1,000-fold... plasmid profiles of strains and by restriction endonuclease analysis of chromosomal DNAs. The following five administered Lactobacillus strains were reisolated from the mucosa 1 day after the end of administration: *Lactobacillus plantarum* 299 and 299v, *Lactobacillus casei* subsp. *rhamnosus* 271, *Lactobacillus reuteri* 108, and *Lactobacillus agilis* 294. All of these strains were also found 11 days after administration was terminated, although *L. plantarum* 299 and 299v were dominant.

Identifiers-- ...DAIRY-PRODUCTS; MICROFLORA; ACIDOPHILUS; GUT; INFECTIONS; YOGURT; IMPACT

Research Fronts: ...TRANSLOCATION; GLUTAMINE-METABOLISM IN SEPTIC RATS; INCREASED GUT PERMEABILITY FOLLOWING BURN TRAUMA)

91-1233 002 ( CLOSTRIDIUM-DIFFICILE TOXIN-A; ANTIBIOTIC-ASSOCIATED DIARRHEA; NORMAL INTESTINAL MICROFLORA)

91-2849 001 (ANAEROBIC GLYCEROL DEGRADATION; BIOCONTROL STRAINS OF...

Cited References:

18/3,K/11 (Item 8 from file: 34) Links

SciSearch(R) Cited Ref Sci

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01123323 Genuine Article#: FY715 No. References: 230  
MEDICAL PROGRESS - BACTERIAL AND PROTOZOAL GASTROENTERITIS

Author: GUERRANT RL; BOBAK DA

Corporate Source: UNIV VIRGINIA,SCH MED,DEPT MED,DIV GEOG  
MED/CHARLOTTESVILLE//VA/22908; UNIV VIRGINIA,SCH MED,DEPT  
MICROBIOL/CHARLOTTESVILLE//VA/22908

Journal: NEW ENGLAND JOURNAL OF MEDICINE , 1991 , V 325 , N5 , P 327-340

Language: ENGLISH Document Type: REVIEW

Identifiers-- ...ACQUIRED-IMMUNODEFICIENCY-SYNDROME; STABLE ENTERO-TOXIN;  
DAY-CARE-CENTERS; ENTEROHEMORRHAGIC ESCHERICHIA-COLI; CAMPYLOBACTER-JEJUNI  
INFECTIONS; CLOSTRIDIUM-DIFFICILE INFECTION; ISOSPORA-BELLI INFECTION;  
TISSUE-CULTURE CELLS; AUREUS DELTA-TOXIN; CHRONIC DIARRHEA

Research Fronts: ...CALVES)

89-0600 004 (PNEUMOCYSTIS-CARINII PNEUMONIA; ACQUIRED IMMUNODEFICIENCY SYNDROME;  
AIDS PATIENTS)

89-0757 004 (CLOSTRIDIUM-DIFFICILE TOXIN-A; PSEUDOMEMBRANOUS COLITIS;  
ANTIBIOTIC-ASSOCIATED DIARRHEA)

89-0560 002 (ACUTE DIARRHEA IN PRIMARY CARE UNITS; PRESCRIPTION... 89-0268 001  
(FOOD HYPERSENSITIVITY; PATHOGENESIS OF ATOPIC-DERMATITIS; LEGUME BOTANICAL FAMILY  
IN CHILDREN; COW MILK ALLERGY; LATEX CONTACT URTICARIA; PATCH TEST)

89-0546 001 (PULSE OXIMETRY; NOSOCOMIAL PNEUMONIA; PROTECTED BRUSH... DIARRHEA)

89-3656 001 (ENTEROPATHOGENIC ESCHERICHIA-COLI; PERSISTENT DIARRHEA; LOCALIZED

clostridifficile.txt

ADHERENCE FACTOR)

89-4088 001 ( ORAL CHOLERA VACCINES; KILLED WHOLE CELLS; HUMAN ENTERO-TOXIGENIC ESCHERICHIA-COLI; ISOLATED OUTER-MEMBRANE ANTIGENS)

89...

18/3,K/12 (Item 9 from file: 34) Links

SciSearch(R) Cited Ref Sci

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01085922 Genuine Article#: FV062 No. References: 31

A HUMAN LACTOBACILLUS STRAIN (LACTOBACILLUS-CASEI SP STRAIN GG) PROMOTES RECOVERY FROM ACUTE DIARRHEA IN CHILDREN

Author: ISOLAURI E; JUNTUNEN M; RAUTANEN T; SILLANAUKEE P; KOIVULA T

Corporate Source: UNIV TAMPERE,DEPT CLIN SCI/SF-33520 TAMPERE//FINLAND/; TAMPERE UNIV HOSP,DEPT PEDIAT/TAMPERE//FINLAND/; TAMPERE UNIV HOSP,DEPT CLIN CHEM/TAMPERE//FINLAND/

Journal: PEDIATRICS , 1991 , V 88 , N1 , P 90-97

Language: ENGLISH Document Type: ARTICLE ( Abstract Available )

Abstract: ...rotavirus), 71 well-nourished children between 4 and 45 months of age were studied. After oral rehydration, the patients randomly received either Lactobacillus GG-fermented milk product, 125 g (10(10-11) colony-forming units) twice daily (group 1); Lactobacillus GG... 10(10-11) colony-forming units) twice daily (group 2); or a placebo, a pasteurized yogurt (group 3) 125 g twice daily; each diet was given for 5 days, in addition... recovery from diarrhea. It is further suggested that Lactobacillus GG in the form of fermented milk or freeze-dried powder is effective in shortening the course of acute diarrhea.

Identifiers-- ...ORAL REHYDRATION; NUTRITIONAL MANAGEMENT; INTESTINAL MICROFLORA; FERMENTED MILK; PERMEABILITY; ACIDOPHILUS; FORMULA

Research Fronts: 89-0740 002 (DIETARY FIBER; LACTULOSE HYDROGEN BREATH TEST; ORAL REHYDRATION THERAPY; OROCECAL TRANSIT-TIME; BAKING HULLESS BARLEY; ENZYME SUPPLEMENTATION)

89-0757 001 (CLOSTRIDIUM- DIFFICILE TOXIN-A; PSEUDOMEMBRANOUS COLITIS; ANTIBIOTIC-ASSOCIATED DIARRHEA)

Cited References:

18/3,K/13 (Item 10 from file: 34) Links

SciSearch(R) Cited Ref Sci

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01010768 Genuine Article#: FN775 No. References: 27

PASSIVE-IMMUNIZATION OF HAMSTERS AGAINST DISEASE CAUSED BY CLOSTRIDIUM-DIFFICILE BY USE OF BOVINE IMMUNOGLOBULIN-G CONCENTRATE

Author: LYERLY DM; BOSTWICK EF; BINION SB; WILKINS TD

Corporate Source: VIRGINIA POLYTECH INST & STATE UNIV,DEPT ANAEROB MICROBIOL/BLACKSBURG//VA/24061; PROCOR TECHNOL INC/MINNEAPOLIS//MN/55440

Journal: INFECTION AND IMMUNITY , 1991 , V 59 , N6 , P 2215-2218

Language: ENGLISH Document Type: NOTE ( Abstract Available )

PASSIVE-IMMUNIZATION OF HAMSTERS AGAINST DISEASE CAUSED BY CLOSTRIDIUM-DIFFICILE BY USE OF BOVINE IMMUNOGLOBULIN-G CONCENTRATE

Abstract: Gestating Holstein cows were vaccinated with Clostridium difficile toxoid prepared from the culture filtrate of a strain that produces high levels of toxins... hyperimmune bovine IgG concentrate were protected against C. difficile disease. These results suggest that orally administered hyperimmune bovine IgG specific for C. difficile culture filtrate may be useful in prophylaxis against...

Identifiers-- ...ANTIBIOTIC-ASSOCIATED CECITIS; SACCHAROMYCES-BOULARDII; TOXIN- A; ROTAVIRUS GASTROENTERITIS; MILK IMMUNOGLOBULINS; INDUCED MORTALITY;

ESCHERICHIA-COLI; CHOLERA-TOXIN; PREVENTION; SUPPRESSION

Research Fronts: 89-0757 001 (CLOSTRIDIUM-DIFFICILE TOXIN-A; PSEUDOMEMBRANOUS COLITIS; ANTIBIOTIC-ASSOCIATED DIARRHEA)

Cited References:

clostridium\_difficile.txt

18/3,K/14 (Item 1 from file: 45) Links

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02101575 EMCare No: 46440308

Clostridium difficile-associated disease: Changing epidemiology and implications for management

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Drugs ( DRUGS ) ( New Zealand ) 2007 , 67/4 (487-502)

CODEN: DRUGA ISSN: 0012-6667 eISSN: 0012-6667

DOCUMENT TYPE: Journal ; Review

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 110

RECORD TYPE: Abstract

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Clostridium difficile-associated disease: Changing epidemiology and implications for management

Clostridium difficile-associated disease (CDAD) is increasingly being reported in many regions throughout the world. The reasons... ...to be reactive; however, the successful control of C. difficile will require healthcare systems (including administrators, and leadership within several departments such as environmental services, infection control, infectious diseases, gastroenterology, surgery... DESCRIPTORS:

\*

Clostridium difficile; bacterial strain; clinical trial; diagnostic procedure; disease severity; drug cost; drug dose increase; drug exposure... ...planning; antiinfective agent; bacterial vaccine; colestipol; colestyramine; domestic chemical; immunoglobulin; metronidazole; monoclonal antibody; nitazoxanide; polymer; probiotic agent; ramoplanin; rifampicin; rifaximin; tinidazole; vancomycin  
TERMS (UNCONTROLLED): Clostridium difficile associated disease; Clostridium difficile toxin A antibody; Clostridium difficile toxin B antibody; Clostridium difficile vaccine; mdx 066; mdx 1388; par 101; tolevemar

18/3,K/15 (Item 2 from file: 45) Links

Fulltext available through: STIC Full Text Retrieval Options  
EMCare

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01300008 EMCare No: 36798712

Clostridium difficile colitis following an open fracture: Complications occur, even with straightforward trauma and straightforward decisions

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Journal of Emergency Nursing ( J. EMERG. NURS. ) ( United States ) 2003 , 29/3 (294-296)

ISSN: 0099-1767

DOCUMENT TYPE: Journal ; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 5

RECORD TYPE: Abstract

Clostridium difficile colitis following an open fracture: Complications occur, even with straightforward trauma and straightforward decisions

Should we avoid administering antibiotics to patients? Certainly the answer must be no, but antibiotic use must be judicious... factors - the severity of other illnesses and a reduced level of serum IgG antibody to toxin A - have been linked to an increased probability of developing symptomatic C difficile colitis. Preexisting renal... a few tactics can be implemented to decrease the overall risk. Having patients drink fermented milk, eat yogurt with live cultures, or take lactobacillus pills while they are taking antibiotics may prevent modification...

DESCRIPTORS:

\* colitis; \*open fracture; \*Clostridium difficile; \*injury  
...antitoxin; toxin; antibody; bacterial toxin; patient; nurse; diabetes mellitus; hospitalization; hand washing; risk; kidney disease; milk; risk factor; immunization; hospital infection; Lactobacillus; intestine flora; drug use; hospital management; human tissue; human...

TERMS (UNCONTROLLED):

18/3,K/16 (Item 1 from file: 50) Links

Fulltext available through: STIC Full Text Retrieval Options

CAB Abstracts

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0008977836 CAB Accession Number: 20063014301

Tylosin-responsive chronic diarrhea in dogs.

Westermarck, E.; Skrzypczak, T.; Harmoinen, J.; Steiner, J. M.; Ruaux, C. G.; Williams, D. A.; Eerola, E.; Sundback, P.; Rinkinen, M.

Author email address: elias.westermarck@helsinki.fi

Department of Clinical Veterinary Sciences, Faculty of Veterinary Medicine, University of Helsinki, P.O. Box 57, 00014 Helsinki, Finland.

Journal of Veterinary Internal Medicine vol. 19 ( 2 ): p.177-186

Publication Year: 2005

ISSN: 0891-6640

Digital Object Identifier: 10.1892/0891-6640(2005)19<177:TCDID>2.0.CO;2

Publisher: American College of Veterinary Internal Medicine Lakewood , USA

Language: English Record Type: Abstract

Document Type: Journal article

... diarrhea in all dogs within 3 days and in most dogs within 24 hours. Tylosin administration controlled diarrhea in all dogs, but after it was discontinued, diarrhea reappeared in 12 (85... 14 dogs within 30 days. Prednisone given for 3 days did not completely resolve diarrhea. Probiotic Lactobacillus rhamnosus GG did not prevent the relapse of diarrhea in any of 9 dogs... bacteria ( *Salmonella* spp., *Campylobacter* spp., *Yersinia* spp., or *Lawsonia intracellularis* ), and *Clostridium perfringens* enterotoxin and *Clostridium difficile* A toxin. A possible etiologic factor is a specific enteropathogenic organism that is a common resident in the...

18/3,K/17 (Item 1 from file: 71) Links

Fulltext available through: STIC Full Text Retrieval Options

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00236678 95024955

Immunoglobulin and non-immunoglobulin components of human milk inhibit Clostridium difficile toxin A-receptor binding

Rolfe R.D.; Song W.

Address: R.D. Rolfe, Department Microbiology/Immunology, School of Medicine, Texas

clostridiffficile.txt

Tech Univ. Hlth Sci. Center, Lubbock, TX 79430 , United States  
Journal : Journal of Medical Microbiology , 42/1 (10-19) , 1995 , United Kingdom  
PUBLICATION DATE: 19950000  
CODEN: JMMIA  
ISSN: 0022-2615  
Document Type: Article  
Languages: English Summary Languages: English  
Immunoglobulin and non-immunoglobulin components of human milk inhibit Clostridium difficile toxin A-receptor binding

Clostridium difficile is isolated from the intestinal tracts of > 50% of healthy infants. The mechanism by which... . . .toxigenic C. difficile is generally asymptomatic is unknown but may reflect the presence in human milk of neutralising activity against C. difficile toxin A. On this basis, the ability of human milk to inhibit the binding of toxin A to a purified hamster brush border membrane receptor was determined. Ten milk samples from healthy volunteers in various stages of lactation inhibited the binding of toxin A to the receptor by an average of 90%. Heating and dialysis did not significantly alter the inhibitory activity of any of the milk samples. Human milk protected adult hamsters against a lethal challenge with toxin A but had no effect on the cytotoxic activity of the toxin. SDS-PAGE and ligand blot analyses showed that there were at least four distinct factors in human milk that specifically bound toxin A. Thiophilic adsorption chromatography was used to-separate immunoglobulin from non-immunoglobulin components of human milk. IgA was the only immunoglobulin detected in human milk and > >90% of this immunoglobulin was recovered after purification by thiophilic adsorption. Both the unbound non-immunoglobulin and bound immunoglobulin fractions of human milk inhibited the binding of-toxin A to the purified receptor. These results suggest that human milk may be important in protecting infants against C. difficile-associated intestinal disease.

CLASSIFICATION CODE AND DESCRIPTION:

Modlecular Sequence Databank Number: ...Mucosal and Oral Immunity

18/3,K/18 (Item 1 from file: 73) Links  
Fulltext available through: STIC Full Text Retrieval Options  
EMBASE  
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0082424342 EMBASE No: 2008215262  
Clostridium difficile infection

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The Lancet ( Lancet ) ( United Kingdom ) March 9, 2008 , 371/9623 (1486-1488)  
CODEN: LANCA ISSN: 0140-6736  
Publisher Item Identifier: S0140673608606352  
Item Identifier (DOI): 10.1016/S0140-6736(08)60635-2  
Document Type: Journal ; Article Record Type: Citation  
Language: English  
Number of References: 19  
Clostridium difficile infection

Drug Descriptors:

\*

clostridium\_difficile.txt

antibiotic agent--clinical trial--ct; antibiotic agent--drug therapy--dt; antibiotic agent--oral drug administration--po; Clostridium difficile toxin A--drug therapy--dt ; Clostridium difficile toxin A--parenteral drug administration--pa; Clostridium difficile toxin B--drug therapy--dt; Clostridium difficile toxin B--parenteral drug administration--pa; enema; immunoglobulin--drug therapy--dt; immunoglobulin--intravenous drug administration--iv; metronidazole --clinical trial--ct; metronidazole--drug comparison--cm; metronidazole --drug therapy--dt; metronidazole--intravenous drug administration --iv; metronidazole--oral drug administration--po; probiotic agent--drug therapy--dt; vancomycin--clinical trial--ct; vancomycin--drug comparison--cm; vancomycin--drug dose--do; vancomycin --drug therapy--dt; vancomycin--intravenous drug administration--iv; vancomycin--oral drug administration--po

Medical Descriptors:

antibiotic resistance; antibiotic therapy; article; bacterial strain; bacterial virulence; clinical feature; clinical trial; Clostridium difficile; comorbidity; delayed diagnosis; diarrhea--etiology--et; disease severity; drug dose reduction; drug megadose; endoscopy; enzyme...

Orig. Descriptors:

Medical Terms (Uncontrolled): Clostridium difficile infection--diagnosis--di; Clostridium difficile infection--drug therapy--dt; Clostridium difficile infection--epidemiology--ep; Clostridium difficile infection--etiology--et; Clostridium difficile infection--prevention--pc

Orig. Terms (Uncontrolled):

18/3,K/19 (Item 2 from file: 73) Links

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0082391842 EMBASE No: 2008191703

Current and future treatment modalities for Clostridium difficile-associated disease

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American Journal of Health-System Pharmacy ( Am. J. Health-Syst. Pharm. ) ( United States ) April 15, 2008 , 65/8 (705-715)

CODEN: AHSPE ISSN: 1079-2082

Item Identifier (DOI): 10.2146/ajhp070077

Document Type: Journal ; Review Record Type: Abstract

Language: English Summary language: English

Number of References: 106

Current and future treatment modalities for Clostridium difficile-associated disease

Purpose. Current and future treatment modalities for Clostridium difficile-associated disease (CDAD) are reviewed. Summary. *C. difficile*, an anaerobic, spore-forming, gram-negative rod...

Drug Descriptors:

\* ...metronidazole--drug comparison--cm; \*metronidazole--drug dose--do; \* metronidazole--drug therapy--dt; \*metronidazole--intravenous drug administration--iv; \*metronidazole--oral drug administration--po; \*metronidazole--pharmacoeconomics--pe; \* metronidazole--pharmacokinetics--pk; \*nisin--drug comparison--cm; \*nisin --drug therapy--dt... ...vancomycin--drug comparison--cm; \*vancomycin--drug dose--do; \*vancomycin --drug therapy--dt; \*vancomycin--intravenous drug administration--iv ; \*vancomycin--oral drug

clostridium difficile.txt

administration--po; \*vancomycin --pharmacoeconomics--pe;  
\*vancomycin--pharmacokinetics--pk; \*vancomycin --rectal drug administration--rc  
antibiotic agent--drug therapy--dt; antibiotic agent--intravenous drug  
administration--iv; antibiotic agent--oral drug administration--po; antibiotic  
agent--rectal drug administration--rc; bacterial vaccine--clinical trial--ct;  
bacterial vaccine--drug therapy--dt; bacterial vaccine--intramuscular drug  
administration--im; bile acid sequestrant--drug therapy--dt; cefazolin;  
ceftazidime--drug therapy--dt; cephalosporin--adverse drug...  
...immunoglobulin--drug comparison--cm; immunoglobulin--drug dose--do;  
immunoglobulin--drug therapy--dt; immunoglobulin--intravenous drug  
administration--iv; placebo; probiotic agent--clinical trial --ct; probiotic  
agent--drug therapy--dt; probiotic agent-- oral drug administration--po; proton pump  
inhibitor--adverse drug reaction--ae; quinoline derived antiinfective agent--adverse  
drug reaction...  
Medical Descriptors:  
\* ...epidemiology--ep; \*bacterial infection--etiology--et; \*bacterial  
infection--prevention--pc; \*bacterial infection--side effect--si; \* Clostridium  
difficile

Drug Terms (Uncontrolled): clostridium toxin a--drug therapy--dt; clostridium toxin  
b--drug therapy--dt; flagellar cap protein--drug therapy--dt

Medical Terms (Uncontrolled):

18/3,K/20 (Item 3 from file: 73) Links

Fulltext available through: STIC Full Text Retrieval Options

EMBASE

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0082351881 EMBASE No: 2008176798

A probiotic drink prevented diarrhoea and Clostridium difficile infection in older  
patients taking antibiotics: Commentary

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Corresp. Author/Affil: Miller M.: Jewish General Hospital, McGill University,  
Montreal, QC, Canada

Evidence-Based Medicine ( Evid.-Based Med. ) ( United Kingdom ) April 1, 2008 ,  
13/2 (46)

CODEN: EBMEF ISSN: 1356-5524

Item Identifier (DOI): 10.1136/ebm.13.2.46

Document Type: Journal ; Short Survey Record Type: Citation

Language: English

Number of References: 1

A probiotic drink prevented diarrhoea and Clostridium difficile infection in older  
patients taking antibiotics: Commentary

Drug Descriptors:

\* antibiotic agent--adverse drug reaction--ae; \*antibiotic agent--intravenous drug  
administration--iv; \*antibiotic agent--oral drug administration--po; \*probiotic  
agent--clinical trial--ct; \* probiotic agent--drug therapy--dt  
Clostridium difficile toxin A--endogenous compound--ec; Clostridium difficile toxin  
B --endogenous compound--ec; placebo

Medical Descriptors:

clinical trial; Clostridium difficile; colony forming unit; controlled clinical  
trial; evidence based medicine; feces analysis; fluid intake; follow up; food  
intake; hospital patient; human; Lactobacillus; Lactobacillus casei; methodology;  
milk; patient selection; randomized controlled trial; short survey; Streptococcus  
thermophilus; systematic error; treatment duration; treatment outcome...  
Orig. Descriptors:

18/3,K/21 (Item 4 from file: 73) Links

Fulltext available through: [STIC Full Text Retrieval Options](#)

EMBASE

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0082308383 EMBASE No: 2008108863

Treatment of Clostridium difficile infection

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Clinical Infectious Diseases ( Clin. Infect. Dis. ) ( United States ) January  
15, 2008 , 46/SUPPL. 1 (S32-S42)

CODEN: CIDIE ISSN: 1058-4838

Item Identifier (DOI): 10.1086/521860

Document Type: Journal ; Review Record Type:

Language: English Summary

Number of References: 114

Recent outbreaks of *Clostridium difficile* infection (CDI) in North America have been due to a more virulent, possibly more resistant... . . . been used successfully for CDI treatment but, like metronidazole, lack United States Food and Drug Administration approval for this indication. Experimental treatments currently in clinical development include a toxin-binding polymer...

## Drug Descriptors:

\*

...agent--drug therapy--dt; antiinfective agent--drug therapy--dt; bacitracin--drug therapy--dt; bacterial vaccine; Clostridium difficile toxin A--drug therapy--dt; Clostridium difficile toxin A--parenteral drug administration--pa; Clostridium difficile toxin B--drug therapy--dt; Clostridium difficile toxin B--parenteral drug administration--pa; colestyramine--drug therapy--dt; colestyramine--pharmacology--pd; fusidic acid--drug therapy--dt; golytely; immunoglobulin--drug therapy--dt; immunoglobulin--intravenous drug administration--iv; immunoglobulin --pharmacoconomics--pe; metronidazole--adverse drug reaction--ae; metronidazole--drug combination--cb; metronidazole--drug comparison--cm; metronidazole--drug therapy--dt; metronidazole--oral drug administration--po; metronidazole--pharmacoconomics--pe; metronidazole--pharmacology--pd; monoclonal antibody; nitazoxanide--drug comparison--cm; nitazoxanide--drug therapy--dt; probiotic agent --drug therapy--dt; proton pump inhibitor--drug therapy--dt; ramoplanin --drug therapy--dt; ramoplanin... ...drug therapy--dt; rifalazil--pharmacology--pd; rifampicin--drug combination--cb; rifampicin--drug comparison--cm; rifampicin--oral drug administration--po; rifaximin--drug therapy--dt; rifaximin --pharmacology--pd; teicoplanin--drug therapy--dt; tiacumicin B--drug... ...pd; tolevamer--drug comparison--cm; tolevamer--drug dose--do; tolevamer --drug therapy--dt; vancomycin--drug administration--ad; vancomycin --drug comparison--cm; vancomycin--drug dose--do; vancomycin--drug therapy --dt; vancomycin--intravenous drug administration--iv; vancomycin-- oral drug administration--po; vancomycin--pharmacoconomics --pe; vancomycin--pharmacology--pd

## Medical Descriptors:

\* bacterial infection--drug therapy--dt; \*bacterial infection--etiology--et;

### \**Clostridium difficile*

algorithm; bacterial strain; bacterial virulence; data analysis; drug approval; drug efficacy; food and drug administration; human; monotherapy; nonhuman; North America; peripheral neuropathy--side effect --si; priority journal; recurrent disease; review...

clostridifficile.txt

18/3,K/22 (Item 5 from file: 73) Links

Fulltext available through: STIC Full Text Retrieval Options

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0082252446 EMBASE No: 2008043864

Clostridium difficile - Associated disease: Update and focus on non - Antibiotic strategies

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Age and Ageing ( Age Ageing ) ( United Kingdom ) January 1, 2008 , 37/1 (14-18) CODEN: AANGA ISSN: 0002-0729 eISSN: 1468-2834

Item Identifier (DOI): 10.1093/ageing/afm159

Document Type: Journal ; Review Record Type: Abstract

Language: English Summary language: English

Number of References: 29

Clostridium difficile - Associated disease: Update and focus on non - Antibiotic strategies

Clostridium difficile-associated disease (CDAD) is a problem of especially the frail elderly. Changes in virulence of...

Drug Descriptors:

\* ...antibiotic agent--drug combination--cb; antibiotic agent--drug therapy --dt; antiinfective agent--drug therapy--dt; Clostridium difficile toxin A--endogenous compound--ec; Clostridium difficile toxin B--endogenous compound--ec; colestyramine--drug combination--cb; colestyramine--drug therapy--dt; hypertensive factor--drug therapy... . . . .monoclonal antibody--clinical trial--ct; monoclonal antibody--drug combination--cb; monoclonal antibody--drug therapy--dt; probiotic agent--adverse drug reaction--ae; probiotic agent--clinical trial --ct; probiotic agent--drug therapy--dt; probiotic agent-- oral drug administration--po; tolevamer--drug therapy--dt; vancomycin--drug therapy--dt

Medical Descriptors:

\* ...prevention--pc; \*bacterial infection--side effect--si; \*bacterial infection--surgery--su; \*bacterial infection--therapy--th; \* Clostridium difficile

Drug Terms (Uncontrolled): Clostridium difficile toxin monoclonal antibody--clinical trial--ct; Clostridium difficile toxin monoclonal antibody --drug combination--cb; Clostridium difficile toxin monoclonal antibody--drug therapy--dt

Medical Terms (Uncontrolled):

18/3,K/23 (Item 6 from file: 73) Links

Fulltext available through: STIC Full Text Retrieval Options

EMBASE

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0082230672 EMBASE No: 2008020576

Update on the changing epidemiology of Clostridium difficile -associated disease

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clostridium difficile.txt

Nature Clinical Practice Gastroenterology and Hepatology ( Nat. Clin. Pract. Gastroenterol. Hepatol. ) ( United Kingdom ) January 1, 2008 , 5/1 (40-48)

ISSN: 1743-4378 eISSN: 1743-4386

Publisher Item Identifier: NCPGASTHEP1029

Item Identifier (DOI): 10.1038/ncpgasthep1029

Document Type: Journal ; Review Record Type: Abstract

Language: English Summary language: English

Number of References: 74

Update on the changing epidemiology of Clostridium difficile -associated disease

In the past, Clostridium difficile-associated disease (CDAD) was thought of mainly as a nosocomial disease associated with the use...

Drug Descriptors:

\*

bacitracin--drug therapy--dt; beta lactam antibiotic; cephalosporin; clindamycin; Clostridium difficile toxin A --endogenous compound--ec; Clostridium difficile toxin B--endogenous compound--ec; fusidic acid--drug therapy--dt; immunoglobulin--drug therapy--dt; immunoglobulin--intravenous drug administration--iv; metronidazole--clinical trial--ct; metronidazole --drug combination--cb; metronidazole--drug comparison--cm; metronidazole --drug therapy--dt; metronidazole--intravenous drug administration --iv; nitazoxanide--drug therapy--dt; placebo; polymer--clinical trial--ct; polymer--drug dose--do; polymer--drug therapy--dt; probiotic agent --adverse drug reaction--ae; probiotic agent--clinical trial--ct; probiotic agent--drug combination--cb; probiotic agent--drug therapy--dt; quinoline derived antiinfective agent--drug therapy--dt; rifampicin--drug therapy--dt... ...therapy--dt; vancomycin--drug combination--cb; vancomycin--drug comparison--cm; vancomycin--drug therapy--dt; vancomycin--oral drug administration--po

Medical Descriptors:

bacteremia--side effect--si; bacterial strain; bacterial virulence; clinical effectiveness; clinical feature; clinical trial; Clostridium difficile; communicable disease; disease association; disease surveillance; drug choice; drug dose comparison; drug megadose; drug substitution...

Orig. Descriptors:

18/3, K/24 (Item 7 from file: 73) Links

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0082219642 EMBASE No: 2008008548

Difficulties with Clostridium difficile

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Surgical Infections ( Surg. Infect. ) ( United States ) December 1, 2007 , 8/6 (553-556)

CODEN: SIUNA ISSN: 1096-2964

Item Identifier (DOI): 10.1089/sur.2007.9978

Document Type: Journal ; Editorial Record Type: Citation

Language: English

Number of References: 26

Difficulties with Clostridium difficile

Drug Descriptors:

\*

## clostridifficile.txt

antibiotic agent--drug combination--cb; antibiotic agent--drug therapy--dt; bacitracin--drug therapy--dt; botulinum toxin A; botulinum toxin B; cephalosporin derivative; clindamycin; colestyramine --drug combination--cb; colestyramine--drug therapy--dt; fusidic acid--drug therapy--dt; immunoglobulin--drug therapy--dt; immunoglobulin--intravenous drug administration--iv; macrolide; metronidazole--drug therapy--dt; metronidazole--pharmacoconomics--pe; nitazoxanide--drug therapy--dt; probiotic agent--drug therapy--dt; quinoline derived antiinfective agent; rifampicin--drug therapy--dt; teicoplanin--drug therapy--dt; vancomycin--drug dose--do; vancomycin--drug therapy--dt; vancomycin-- oral drug administration--po  
Medical Descriptors:

#### Medical Descriptors:

\* . . .management--dm; \*bacterial infection--drug therapy--dt; \*bacterial infection--epidemiology--ep; \*bacterial infection--etiology--et; \* Clostridium difficile; \*hospital infection--complication--co; \*hospital infection--disease management--dm; \*hospital infection--drug therapy--dt; \*hospital...

CAS Registry Number: 1405-87-4 (bacitracin); 93384-43-1 (botulinum toxin A); 18323-44-9 (clindamycin); 11041-12-6...

## SECTION HEADINGS:

18/3, K/25 (Item 8 from file: 73) Links

Fulltext available through: STIC Full Text Retrieval Options

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0082062808 EMBASE No: 2007497351

## **Clostridium difficile colitis: A reemerging threat**

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Journal of Clinical Outcomes Management (J. clin. Outcomes Manage.) (United States) September 1, 2007, 14/9 (505-514)

CODEN: JCOMC ISSN: 1079-6533

Document Type: Journal ; Review Record Type: Abstract

Language: English Summary language: English

Number of References: 105

## **Clostridium difficile colitis: A reemerging threat**

\* Objective: To report recent changes in the epidemiology of *Clostridium difficile*-associated diarrhea (CDAD) and to discuss its diagnosis, treatment, and prevention. \* Methods: Qualitative review of... hospital outbreaks. This strain, called BI/NAP1, produces 16 to 23 times the amount of toxin A and B produced by standard strains and has been associated with more severe CDAD and...

## Standard Strains

—

...cephalosporin derivative--adverse drug reaction--ae; cephalosporin derivative--drug therapy--dt; clindamycin--drug therapy--dt; Clostridium difficile toxin A--endogenous compound--ec; Clostridium difficile toxin B --endogenous compound--ec; colestipol--drug therapy--dt; colestyramine --drug therapy--dt; metronidazole--adverse drug reaction--ae; metronidazole --drug therapy--dt; metronidazole--intravenous drug administration --iv; metronidazole--oral drug administration--po; nitazoxanide--adverse drug reaction--ae; nitazoxanide--drug therapy--dt; probiotic agent--drug therapy--dt; proton pump inhibitor--adverse drug reaction--ae; quinoline derived antiinfective agent... . . .ae; rifaximin--drug therapy--dt; vancomycin--adverse drug reaction--ae; vancomycin--drug therapy--dt; vancomycin--oral drug administration--po

clostrdifficile.txt

Medical Descriptors:

\* Clostridium difficile; \*colitis--diagnosis--di; \*colitis --drug therapy--dt;  
\*colitis--epidemiology--ep; \*colitis--etiology--et; \* colitis--prevention...

18/3,K/26 (Item 9 from file: 73) Links

Fulltext available through: STIC Full Text Retrieval Options

EMBASE

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0082051468 EMBASE No: 2007485980

Diarrheal Diseases in the Elderly

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Clinics in Geriatric Medicine ( Clin. Geriatr. Med. ) ( United States ) November 1, 2007 , 23/4 (833-856)

CODEN: CGMEE ISSN: 0749-0690

Publisher Item Identifier: S0749069007000572

Item Identifier (DOI): 10.1016/j.cger.2007.06.005

Document Type: Journal ; Review Record Type: Abstract

Language: English Summary language: English

Number of References: 153

Drug Descriptors:

\*  
bacitracin--drug therapy--dt; bisphosphonic acid derivative--drug therapy --dt;  
budesonide--drug therapy--dt; Clostridium difficile toxin A--drug therapy--dt;  
Clostridium difficile toxin B--drug therapy--dt; colestipol--drug comparison--cm;  
colestipol--drug therapy--dt; colestipol--pharmacology--pd; colestyramine...  
...therapy--dt; fusidic acid--pharmacology--pd; immunoglobulin G--drug therapy--dt;  
immunoglobulin G--intravenous drug administration--iv; loperamide--drug therapy--dt;  
mercaptopurine--drug therapy--dt; mesalazine --drug therapy--dt;  
methylprednisolone--drug therapy--dt; methylprednisolone--intravenous drug  
administration--iv; metronidazole--clinical trial--ct; metronidazole--drug  
comparison--cm; metronidazole--drug therapy--dt; metronidazole--intravenous drug  
administration--iv; metronidazole--pharmacology--pd; nitazoxanide --clinical  
trial--ct; nitazoxanide--drug therapy--dt; nitazoxanide --pharmacology--pd; opiate;  
probiotic agent; ramoplanin--clinical trial--ct; resin--pharmacology--pd;  
rifalazil--clinical trial--ct; rifampicin--drug combination... . . .pharmacology--pd;  
vancomycin--drug combination--cb; vancomycin--drug comparison--cm; vancomycin--drug  
therapy--dt; vancomycin--oral drug administration--po; vancomycin--pharmacology--pd  
Medical Descriptors:

...th; bacterial transmission; Calicivirus; Campylobacter jejuni; chronic  
diarrhea--drug therapy--dt; clinical feature; clinical trial; Clostridium difficile;  
colitis--drug therapy--dt; drug withdrawal; enteritis; Escherichia coli; feces  
microflora; human; infection risk; infectious...

Orig. Descriptors:

18/3,K/27 (Item 10 from file: 73) Links

Fulltext available through: STIC Full Text Retrieval Options

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0081709526 EMBASE No: 2007143203

Clostridium difficile-associated disease: Changing epidemiology and implications

clostridifficile.txt

for management

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Drugs ( Drugs ) ( New Zealand ) April 13, 2007 , 67/4 (487-502)

CODEN: DRUGA ISSN: 0012-6667 eISSN: 0012-6667

Item Identifier (DOI): 10.2165/00003495-200767040-00001

URL: <http://drugs.adisonline.com/pt/re/drugs/pdfhandler.00003495-200767040-00001.pdf?jsessionid=F2FTG4XLSJyLThDF8F89Bh1Fk4FfMKxw7SK61f2jmHX53HBQfnxJ!1570379021!-949856144!8091!-1>

Document Type: Journal ; Review Record Type: Abstract

Language: English Summary language: English

Number of References: 110

Clostridium difficile-associated disease: Changing epidemiology and implications for management

Clostridium difficile-associated disease (CDAD) is increasingly being reported in many regions throughout the world. The reasons... ...to be reactive; however, the successful control of C. difficile will require healthcare systems (including administrators, and leadership within several departments such as environmental services, infection control, infectious diseases, gastroenterology, surgery...).

Drug Descriptors:

\*  
...therapy--dt; colestyramine--drug therapy--dt; domestic chemical; immunoglobulin--drug therapy--dt; immunoglobulin--intravenous drug administration--iv; immunoglobulin--pharmacoconomics--pe; metronidazole--clinical trial--ct; metronidazole--drug combination--cb; metronidazole--drug comparison--cm; metronidazole--drug therapy--dt; metronidazole--intravenous drug administration--iv; metronidazole-- oral drug administration--po; monoclonal antibody--clinical trial--ct; monoclonal antibody--drug therapy--dt; nitazoxanide--clinical trial--ct... ...drug comparison--cm; nitazoxanide--drug therapy--dt; polymer--clinical trial--ct; polymer--drug therapy--dt; probiotic agent--drug therapy --dt; ramoplanin--clinical trial--ct; ramoplanin--drug therapy--dt; rifampicin--drug combination... ...vancomycin--drug combination--cb; vancomycin--drug comparison--cm; vancomycin--drug therapy--dt; vancomycin--intragastric drug administration--ig; vancomycin--oral drug administration--po

Medical Descriptors:

bacterial strain; clinical trial; Clostridium difficile; diagnostic procedure; disease severity; drug cost; drug dose increase; drug exposure; drug substitution; drug withdrawal...

Orig. Descriptors:

Drug Terms (Uncontrolled): Clostridium difficile toxin A antibody --clinical trial--ct; Clostridium difficile toxin A antibody--drug combination--cb; Clostridium difficile toxin A antibody--drug therapy--dt; Clostridium difficile toxin B antibody --clinical trial--ct; Clostridium difficile toxin B antibody--drug combination--cb; Clostridium difficile toxin B antibody--drug therapy--dt; Clostridium difficile vaccine--clinical trial--ct; Clostridium difficile vaccine--drug therapy...

Medical Terms (Uncontrolled): Clostridium difficile associated disease--diagnosis--di; Clostridium difficile associated disease--disease management --dm; Clostridium difficile associated disease--drug therapy --dt; Clostridium difficile associated disease--epidemiology --ep; Clostridium difficile associated

clostrdifficile.txt  
disease--etiology--et; Clostridium difficile associated disease--surgery--su

18/3,K/28 (Item 11 from file: 73) Links

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0081570944 EMBASE No: 2007004160

Clostridium difficile - Associated disease: A rising epidemic in our elderly population

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Clinical Geriatrics ( Clin. Geriatr. ) ( United States ) November 1, 2006 , 14/11 (36-45)

ISSN: 1095-1598

Document Type: Journal ; Article Record Type: Abstract

Language: English Summary Language: English

Number of References: 40

Clostridium difficile - Associated disease: A rising epidemic in our elderly population

Clostridium difficile has been associated with a spectrum of disease, ranging from simple and self-limited diarrhea...

Drug Descriptors:

\*  
...antibiotic agent; antibiotic agent--adverse drug reaction--ae; antineoplastic agent; bacitracin--drug therapy--dt; bacitracin--oral drug administration--po; cephalosporin derivative; Clostridium difficile toxin A--endogenous compound--ec; Clostridium difficile toxin B --endogenous compound--ec; colestipol--drug therapy--dt; colestyramine --drug therapy--dt; corticosteroid; cotrimoxazole; fibrin--endogenous....ec; histamine H2 receptor antagonist--drug comparison--cm; immunoglobulin--drug therapy--dt; immunoglobulin--intravenous drug administration--iv; immunosuppressive agent; metronidazole--drug comparison--cm; metronidazole--drug therapy--dt; metronidazole--intravenous drug administration--iv; metronidazole--oral drug administration--po; mucin--endogenous compound--ec; probiotic agent--drug therapy--dt; proton pump inhibitor--drug comparison--cm; quinoline derived antiinfective agent; Rho....alpha--endogenous compound--ec; vancomycin--drug comparison--cm; vancomycin--drug therapy--dt; vancomycin--intragastric drug administration--ig; vancomycin--oral drug administration--po; vancomycin--rectal drug administration --rc

Medical Descriptors:

Medical Terms (Uncontrolled): Clostridium difficile associated disease--complication--co; Clostridium difficile associated disease--diagnosis--di; Clostridium difficile associated disease--drug therapy--dt; Clostridium difficile associated disease--epidemiology--ep; Clostridium difficile associated disease--etiology--et; Clostridium difficile associated disease--prevention--pc

Orig. Terms (Uncontrolled):

18/3,K/29 (Item 12 from file: 73) Links

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0081535912 EMBASE No: 2006599495

Update on Clostridium difficile associated disease

clostridium difficile.txt

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Current Opinion in Gastroenterology ( Curr. Opin. Gastroenterol. ) ( United States ) January 1, 2007 , 23/1 (4-9)

CODEN: COGAE ISSN: 0267-1379

Publisher Item Identifier: 0000157420070100000003

Item Identifier (DOI): 10.1097/MOG.0b013e32801184ac

Document Type: Journal ; Review Record Type: Abstract

Language: English Summary language: English

Number of References: 42

Update on Clostridium difficile associated disease

...REVIEW: The aim of this article is to report recent changes in the epidemiology of Clostridium difficile associated disease. RECENT FINDINGS: An epidemic of Clostridium difficile associated disease in Quebec was associated with a threefold increase in incidence and a sharp... strain (NAP1/027). This strain was found to produce greater than 10 times as much toxin A and toxin B as historic isolates and has been identified in many institutions throughout North America and Europe...

...spread of this strain as it is fluoroquinolone resistant. An increased rate of community-acquired Clostridium difficile-associated disease has also been noted and, in some cases, without prior antibiotic exposure. Although some studies have suggested an increased failure rate of metronidazole in Clostridium difficile associated disease, it remains the recommended first line treatment for uncomplicated cases. Other antibiotics, a toxin binder, probiotic agents and a vaccine are being tested in clinical trials for efficacy in prevention and treatment of Clostridium difficile associated disease. SUMMARY: The recent increase in the incidence and severity of Clostridium difficile associated disease may be related, at least in part, to the emergence of a highly...

Drug Descriptors:

\* cephalosporin derivative--adverse drug reaction--ae; \*Clostridium difficile toxin A--endogenous compound--ec; \* Clostridium difficile toxin B--endogenous compound--ec; \*metronidazole--drug therapy--dt; \*probiotic agent; \* quinoline derived antiinfective agent--adverse drug reaction--ae

...ae; bacterial vaccine--clinical trial--ct; bacterial vaccine--drug therapy--dt; bacterial vaccine--intramuscular drug administration --im; ciprofloxacin--drug therapy--dt; gatifloxacin--drug therapy--dt; histamine H2 receptor antagonist--adverse drug reaction--ae; immunoglobulin --clinical trial--ct; immunoglobulin--drug therapy--dt; immunoglobulin --intravenous drug administration--iv; interleukin 8--endogenous compound--ec; levofloxacin--drug therapy--dt; macrocyclic compound--drug therapy--dt... therapy--dt; rifalazil--drug therapy--dt; rifaximin--drug therapy--dt; vancomycin--drug therapy--dt; vancomycin--oral drug administration--po

Medical Descriptors:

\* ...epidemiology--ep; \*bacterial infection--etiology--et; \*bacterial infection--prevention--pc; \*bacterial infection--side effect--si; \* Clostridium difficile

18/3, K/30 (Item 13 from file: 73) Links

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0081309964 EMBASE No: 2006372391

A durable response to relapsing Clostridium difficile colitis may require combined

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therapy with high-dose oral vancomycin and intravenous immune globulin

Cone L.A.; Lopez C.; Tarleton H.L.; Jodoin V.D.; Taylor M.; Gade-Andavolu R.; Dreisbach L.P.

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Infectious Diseases in Clinical Practice ( Infect. Dis. Clin. Pract. ) ( United States ) July 1, 2006 , 14/4 (217-220)

CODEN: IDCPE ISSN: 1056-9103

Publisher Item Identifier: 0001904820060700000007

Item Identifier (DOI): 10.1097/01.idc.0000222619.48650.d2

Document Type: Journal ; Article Record Type: Abstract

Language: English Summary language: English

Number of References: 22

A durable response to relapsing Clostridium difficile colitis may require combined therapy with high-dose oral vancomycin and intravenous immune globulin

**BACKGROUND:** Recurrent Clostridium difficile antimicrobial-induced diarrhea follows initial successful therapy with metronidazole or oral vancomycin in 5% to 65% of patients. Specific antibody formation to Toxin A of *C. difficile* has been found in those patients who remain asymptomatic or experience a... initial infection. Because those individuals who often cannot produce specific antibody develop relapsing colitis, we administered intravenous immune globulin (IVIG) to 20 such hospitalized patients and evaluated their responses. **MATERIALS AND...** with recurrent colitis using an enzyme-linked immunosorbent assay. All patients were subsequently placed on oral vancomycin (dosage, 500 mg 3 times a day) and 2 doses of IVIG (dosage, 30... associated disease (one of pneumonia and one of congestive heart failure). Ten patients also received oral *Saccharomyces boulardii*, a nonpathogenic yeast. One of these patients died of heart failure and another had a recurrent disease. **CONCLUSIONS:** IVIG and high-dose oral vancomycin may be an effective regimen in eradicating relapsing *C. difficile* colitis, probably confirming the... the disease lack the ability to produce adequate quantities of neutralizing immunoglobulin G antibody against Toxin A. Oral *S. boulardii* may help maintain freedom from relapse, which, however, was not confirmed in this...

Drug Descriptors:

\* immunoglobulin--drug dose--do; \*immunoglobulin--drug therapy--dt; \* immunoglobulin--intravenous drug administration--iv; \*vancomycin --drug dose--do; \*vancomycin--drug therapy--dt; \*vancomycin--oral drug administration--po immunoglobulin G antibody--endogenous compound--ec; probiotic agent --drug therapy--dt; probiotic agent--oral drug administration--po

Medical Descriptors:

\* Clostridium difficile; \*colitis--drug therapy--dt; \*colitis --etiology--et

18/3,K/31 (Item 14 from file: 73) Links

Fulltext available through: STIC Full Text Retrieval Options  
EMBASE

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0080747653 EMBASE No: 2005392083

Probiotics for recurrent Clostridium difficile disease [1]

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**clostridium\_difficile.txt**

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Journal of Medical Microbiology ( J. Med. Microbiol. ) ( United Kingdom ) September 1, 2005 , 54/9 (905-906)

CODEN: JMMIA ISSN: 0022-2615

Item Identifier (DOI): 10.1099/jmm.0.46096-0

Document Type: Journal ; Letter Record Type: Citation

Language: English

Number of References: 9

Probiotics for recurrent Clostridium difficile disease [1]

**Drug Descriptors:**

\* probiotic agent--adverse drug reaction--ae; \*probiotic agent --clinical trial--ct; \*probiotic agent--drug therapy--dt; \* probiotic agent--oral drug administration--po antibiotic agent--drug therapy--dt; Clostridium difficile toxin A; Clostridium difficile toxin B; metronidazole--drug therapy--dt; placebo

**Medical Descriptors:**

\* bacterial infection--drug therapy--dt; \*bacterial infection--etiology--et; \*bacterial infection--prevention--pc; \*Clostridium difficile; \*Lactobacillus rhamnosus

18/3,K/32 (Item 15 from file: 73) Links

Fulltext available through: STIC Full Text Retrieval Options

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0080741621 EMBASE No: 2005386049

Treatment of Clostridium difficile-associated disease: old therapies and new strategies

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Lancet Infectious Diseases ( Lancet Infect. Dis. ) ( United Kingdom ) September 1, 2005 , 5/9 (549-557)

CODEN: LIDAB ISSN: 1473-3099

Publisher Item Identifier: S1473309905702152

Item Identifier (DOI): 10.1016/S1473-3099(05)70215-2

Document Type: Journal ; Review Record Type: Abstract

Language: English Summary language: English

Number of References: 143

Treatment of Clostridium difficile-associated disease: old therapies and new strategies

Clostridium difficile-associated disease (CDAD) causes substantial morbidity and mortality. The pathogenesis is multifactorial, involving altered bowel....data that led to these recommendations and explore other therapeutic options, including antimicrobials, antibody to toxin A, probiotics, and vaccines. Treatment of CDAD has increasingly been associated with failure and recurrence. Recurrent...

clostrdifficile.txt

Drug Descriptors:

\*  
...diphenoxylate--drug therapy--dt; immunoglobulin--drug dose--do;  
immunoglobulin--drug therapy--dt; immunoglobulin--intravenous drug  
administration--iv; live vaccine--drug development--dv; live vaccine --drug  
therapy--dt; live vaccine--pharmacology--pd; loperamide--drug therapy--dt;  
methylprednisolone--drug therapy--dt; methylprednisolone --intravenous drug  
administration--iv; methylprednisolone --pharmacology--pd; metronidazole--clinical  
trial--ct; metronidazole--drug combination--cb; metronidazole--drug comparison--cm;  
metronidazole--drug concentration--cr; metronidazole--drug therapy--dt;  
metronidazole --intravenous drug administration--iv; metronidazole--oral drug  
administration--po; metronidazole--parenteral drug administration--pa;  
metronidazole--pharmacokinetics--pk; metronidazole--pharmacology--pd; monoclonal  
antibody--clinical trial--ct; monoclonal antibody--drug... ...dv; monoclonal  
antibody--drug therapy--dt; nitazoxanide--clinical trial --ct; nitazoxanide--drug  
therapy--dt; nitazoxanide--oral drug administration--po;  
nitazoxanide--pharmacokinetics--pk; nitazoxanide --pharmacology--pd; probiotic  
agent--clinical trial--ct; probiotic agent--drug combination--cb; probiotic  
agent--drug therapy--dt; probiotic agent--pharmacology--pd; rifampicin--drug  
combination--cb; rifampicin--drug comparison--cm; rifampicin--drug therapy --dt...  
...combination--cb; vancomycin--drug comparison--cm; vancomycin--drug dose --do;  
vancomycin--drug therapy--dt; vancomycin--oral drug administration--po;  
vancomycin--pharmacokinetics--pk; vancomycin --pharmacology--pd

Medical Descriptors:

\* bacterial infection--drug therapy--dt; \*bacterial infection--epidemiology --ep;  
\*bacterial infection--etiology--et; \*Clostridium difficile

18/3, K/33 (Item 16 from file: 73) Links

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0080720212 EMBASE No: 2005364613

Clostridium difficile infection and pseudomembranous colitis

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Best Practice and Research in Clinical Gastroenterology ( Best Pract. Res. Clin.  
Gastroenterol. ) ( United Kingdom ) June 1, 2003 , 17/3 (475-493)

CODEN: BPRCB ISSN: 1521-6918

Item Identifier (DOI): 10.1016/S1521-6918(03)00017-9

Document Type: Journal ; Review Record Type: Abstract

Language: English Summary language: English

Number of References: 129

Clostridium difficile infection and pseudomembranous colitis

Clostridium difficile causes a spectrum of diseases ranging from diarrhoea to  
pseudomembranous colitis, primarily in the hospitalized ...

Drug Descriptors:

\*  
...therapy--dt; bacterial vaccine--drug therapy--dt; beta lactamase inhibitor;  
cefotaxime; ceftriaxone; cephalosporin; ciprofloxacin; clindamycin; Clostridium  
difficile toxin A --endogenous compound--ec; Clostridium difficile toxin  
B--endogenous compound--ec; cotrimoxazole; immunoglobulin--drug therapy--dt;  
macrolide; metronidazole--drug therapy--dt; metronidazole --intravenous drug

clostrdifficile.txt

administration--iv; metronidazole--oral drug administration--po; penicillin G; piperacillin plus tazobactam; polymer--drug therapy--dt; probiotic agent--drug therapy--dt; quinoline derived antiinfective agent; rifampicin; tetracycline; ticarcillin; unclassified drug; vancomycin--drug therapy--dt; vancomycin--intravenous drug administration--iv; vancomycin--oral drug administration--po

Medical Descriptors:

...resistance; antibiotic therapy; bacterial colonization; bacterial infection--etiology--et; bacterial transmission; bacterium culture; clinical feature; Clostridium difficile; colon perforation; cytotoxicity test; diarrhea--etiology--et; disease predisposition; electrolyte disturbance; Enterococcus faecium; environmental exposure...

Orig. Descriptors:

18/3,K/34 (Item 17 from file: 73) Links  
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0080707810 EMBASE No: 2005352194

Saccharomyces boulardii: Basic science and clinical applications in gastroenterology

Issue Title: Probiotics, Prebiotics, and Bacteria: Perspectives and Clinical Applications in Gastroenterology

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Gastroenterology Clinics of North America ( Gastroenterol. Clin. North Am. ) ( United States ) September 1, 2005 , 34/3 (515-532)

CODEN: GCNAE ISSN: 0889-8553

Publisher Item Identifier: S0889855305000555

Item Identifier (DOI): 10.1016/j.gtc.2005.05.009

Document Type: Journal ; Review Record Type: Abstract

Language: English Summary Language: English

Number of References: 77

Drug Descriptors:

\*

...pharmacology--pd; beta lactam antibiotic--drug combination--cb; beta lactam antibiotic--drug therapy--dt; clindamycin; Clostridium difficile toxin A--oral drug administration--po; Clostridium difficile toxin A--pharmacology--pd; mesalazine--drug combination--cb; mesalazine --drug comparison--cm; mesalazine--drug therapy--dt; metronidazole --clinical trial--ct; metronidazole--drug therapy--dt; probiotic agent--adverse drug reaction--ae; probiotic agent--clinical trial --ct; probiotic agent--drug combination--cb; probiotic agent --drug comparison--cm; probiotic agent--drug therapy--dt; probiotic agent--oral drug administration--po; probiotic agent--pharmacology--pd; stomach secretion inhibitor; vancomycin--clinical trial--ct; vancomycin--drug combination--cb; vancomycin...

Medical Descriptors:

...therapy--dt; antiinflammatory activity; bacterial infection--drug therapy--dt; bacterial infection--etiology--et; clinical trial; Clostridium difficile; colitis--drug therapy--dt; colitis --etiology--et; Crohn disease--drug therapy--dt; diarrhea--drug therapy...

Orig. Descriptors:

18/3,K/35 (Item 18 from file: 73) Links  
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Page 80

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0080662343 EMBASE No: 2005306647

Clinical manifestations, treatment and control of infections caused by Clostridium difficile

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Clinical Microbiology and Infection, Supplement ( Clin. Microbiol. Infect. Suppl. ) ( United Kingdom ) July 1, 2005 , 11/4 (57-64)

ISSN: 1470-9465

Document Type: Journal ; Article Record Type: Abstract

Language: English Summary language: English

Number of References: 84

Clinical manifestations, treatment and control of infections caused by Clostridium difficile

Clostridium difficile should be suspected in patients who present with nosocomial diarrhoea. It is more common in... ...reference method for diagnosis is the cell culture cytotoxin test which detects the presence of toxin B in a cellular culture of human fibroblasts, but recovering C. difficile in culture allows the performance of a "second-look" cell culture assay that enhances the potential for diagnosis. Oral metronidazole (500 mg tid or 250 mg every 6 hrs) and oral vancomycin (125 mg every 6 hrs) administered for 10-14 days have similar therapeutic efficacy, with response rates near 90-97%. C. difficile strains resistant to metronidazole and with intermediate resistance to vancomycin have been described. The administration of probiotics such as Saccharomyces boulardii, Lactobacillus sp. or brewer's yeast for prophylaxis of...

Drug Descriptors:

\* ...cm; antiinfective agent--drug dose--do; antiinfective agent--drug therapy--dt; antiinfective agent--intravenous drug administration --iv; antiinfective agent--oral drug administration--po; antiinfective agent--rectal drug administration--rc; bacitracin --adverse drug reaction--ae; bacterial vaccine--drug therapy--dt; cephalosporin derivative--adverse drug reaction--ae; chloramphenicol --adverse drug reaction--ae; clindamycin--adverse drug reaction--ae; Clostridium difficile toxin B--endogenous compound--ec; colestyramine--drug therapy--dt; cotrimoxazole--adverse drug reaction--ae; cytotoxin--endogenous compound--ec; erythromycin--adverse drug reaction--ae; immunoglobulin--drug therapy--dt; immunoglobulin --intravenous drug administration--iv; metronidazole--adverse drug reaction--ae; metronidazole--drug comparison--cm; metronidazole--drug dose --do; metronidazole--drug therapy--dt; metronidazole--intravenous drug administration--iv; metronidazole--oral drug administration--po; penicillin derivative--adverse drug reaction--ae ; probiotic agent--drug therapy--dt; quinolone derivative--adverse drug reaction--ae; rifampicin--adverse drug reaction--ae... ...reaction--ae; vancomycin--drug comparison--cm; vancomycin--drug dose--do ; vancomycin--drug therapy--dt; vancomycin--oral drug administration--po; vancomycin--rectal drug administration --rc

Medical Descriptors:

\* Clostridium difficile; \*diarrhea--diagnosis--di; \*diarrhea --drug therapy--dt; \*diarrhea--etiology--et; \*diarrhea--prevention--pc; \* diarrhea--side...

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0080313240 EMBASE No: 2004499060  
Clostridium difficile - Associated colitis

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Canadian Family Physician ( Can. Fam. Phys. ) ( Canada ) November 1, 2004 ,  
50/NOV. (1536-1545)  
CODEN: CFPHA ISSN: 0008-350X  
Document Type: Journal ; Review Record Type: Abstract  
Language: English Summary Language: English  
Number of References: 47  
Clostridium difficile - Associated colitis

Objective. To review the basic microbiology, pathogenesis of disease, and diagnosis of the nosocomial pathogen Clostridium difficile and to examine therapies recommended by the Canadian Task Force on Preventive Health Care. Quality... ...for therapy were sought, but case-control studies and observational reviews were included. Main message. Clostridium difficile causes approximately 20% of cases of diarrhea associated with antibiotics, including clindamycin and the second... ...metronidazole is recommended; tapering courses of vancomycin and probiotics are used for multiple recurrences. Conclusion. Clostridium difficile is an important nosocomial pathogen requiring prudent use of antibiotics and strict infection-control policies ...

Drug Descriptors:

\* ...ae; bacitracin--drug therapy--dt; cephalosporin--adverse drug reaction --ae; clindamycin--adverse drug reaction--ae; Clostridium difficile toxin A--endogenous compound--ec; Clostridium difficile toxin B--endogenous compound--ec; macrolide--adverse drug reaction--ae; metronidazole--adverse drug reaction--ae; metronidazole--drug therapy--dt; metronidazole --intravenous drug administration--iv; metronidazole--oral drug administration--po; placebo; probiotic agent--drug therapy--dt; quinoline derived antiinfective agent--adverse drug reaction --ae; teicoplanin--drug therapy... ...tetracycline--adverse drug reaction--ae; vancomycin--adverse drug reaction--ae; vancomycin--drug therapy--dt; vancomycin--oral drug administration--po

Medical Descriptors:

\* Clostridium difficile; \*pseudomembranous colitis--diagnosis --di;  
\*pseudomembranous colitis--drug therapy--dt; \*pseudomembranous colitis--etiology--et

18/3,K/37 (Item 20 from file: 73) Links  
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0079872154 EMBASE No: 2004057021  
Clostridium difficile infection

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clostridium difficile.txt

Reviews in Clinical Gerontology ( Rev. Clin. Gerontol. ) ( United Kingdom )  
February 1, 2003 , 13/1 (1-9)

CODEN: RCGEE ISSN: 0959-2598

Item Identifier (DOI): 10.1017/S095925980301311X

Document Type: Journal ; Review Record Type: Citation

Language: English

Number of References: 69

Clostridium difficile infection

Drug Descriptors:

\* aminoglycoside antibiotic agent--drug administration--ad; aminoglycoside antibiotic agent--parenteral drug administration--pa; ampicillin--drug administration--ad; ampicillin--intramuscular drug administration--im; ampicillin--intravenous drug administration--iv; ampicillin--oral drug administration--po; antibiotic agent; bacterial enzyme--endogenous compound--ec; cephalosporin--drug administration--ad; cephalosporin --intramuscular drug administration--im; cephalosporin--intravenous drug administration--iv; cephalosporin--oral drug administration--po; chemotactic factor--endogenous compound--ec; clindamycin--drug administration--ad; clindamycin--intramuscular drug administration--im; clindamycin--intravenous drug administration--iv; clindamycin--oral drug administration--po; Clostridium difficile toxin A; Clostridium difficile toxin B; hydrolase--endogenous compound--ec; immunomodulating agent--drug therapy --dt; metronidazole--drug administration--ad; metronidazole--drug dose--do; metronidazole--drug therapy--dt; metronidazole--oral drug administration--po; probiotic agent--drug therapy--dt; quinoline derived antiinfective agent; rifampicin; trimethoprim; vancomycin --drug administration--ad; vancomycin--drug dose--do; vancomycin --drug therapy--dt; vancomycin--intravenous drug administration--iv; vancomycin--oral drug administration--po; virulence factor --endogenous compound--ec

Medical Descriptors:

\* bacterial infection--drug therapy--dt; \*bacterial infection--epidemiology --ep;  
\*bacterial infection--etiology--et; \*Clostridium difficile

18/3\_K/38 (Item 21 from file: 73) Links

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0079870511 EMBASE No: 2004055378

National Clostridium difficile standards group: Report to the Department of Health

Journal of Hospital Infection ( J. Hosp. Infect. ) ( United Kingdom ) February 1, 2004 , 56/SUPPL. (1-38)

CODEN: JHIND ISSN: 0195-6701

Publisher Item Identifier: S019567010300433X

Item Identifier (DOI): 10.1016/j.jhin.2003.10.016

Document Type: Journal ; Review Record Type: Citation

Language: English

Number of References: 187

National Clostridium difficile standards group: Report to the Department of Health

Drug Descriptors:

\* ...clinical trial--ct; antibiotic agent--drug comparison--cm; antibiotic agent--drug therapy--dt; antibiotic agent--oral drug administration--po; antibiotic agent--pharmacology--pd; antibiotic agent--topical drug administration--tp; bacterial vaccine--drug therapy--dt; bacterial vaccine--intragastric drug administration--ig ; bacterial vaccine--intramuscular drug administration--im;

clostrdifficile.txt

bacterial vaccine--intranasal drug administration--na; bacterial vaccine--intraperitoneal drug administration--ip; bacterial vaccine--pharmacology--pd; bacterial vaccine--subcutaneous drug administration--sc; bacterium antibody--drug comparison--cm; bacterium antibody--drug therapy--dt; bacterium antibody--intravenous drug administration--iv; bacterium antibody--pharmacology--pd; cefalexin --adverse drug reaction--ae; cefalexin--drug therapy--dt; cefalexin-- oral drug administration--po; cefixime--adverse drug reaction --ae; cefixime--clinical trial--ct; cefixime--drug therapy--dt; cefixime--oral drug administration--po; cefixime--pharmacology--pd; cefotaxime--adverse drug reaction--ae; cefotaxime--clinical trial--ct; cefotaxime--drug... . . . drug reaction--ae; cephalosporin derivative--drug comparison--cm; cephalosporin derivative--drug therapy--dt; cephalosporin derivative-- oral drug administration--po; cephalosporin derivative --pharmacology--pd; ciprofloxacin--drug comparison--cm; ciprofloxacin--drug therapy--dt; ciprofloxacin--pharmacology... . . . clarithromycin--adverse drug reaction--ae; clindamycin--adverse drug reaction--ae; clindamycin--drug therapy--dt; clindamycin--oral drug administration--po; clindamycin--pharmacology--pd; clindamycin --topical drug administration--tp; Clostridium difficile toxin A--drug toxicity--to; Clostridium difficile toxin A--endogenous compound--ec; Clostridium difficile toxin B --drug toxicity--to; Clostridium difficile toxin B--endogenous compound--ec; gentamicin--adverse drug reaction--ae; gentamicin--drug comparison--cm; immunoglobulin G--drug therapy--dt; immunoglobulin G--intravenous drug administration--iv; immunoglobulin G--pharmacology--pd; lactoferrin--endogenous compound--ec; levofloxacin--adverse drug reaction--ae; lincomycin... . . . tazobactam--drug comparison--cm; piperacillin plus tazobactam--drug therapy--dt; piperacillin plus tazobactam--pharmacology--pd; probiotic agent--drug therapy--dt; probiotic agent --pharmacology--pd; ribosome RNA--endogenous compound--ec; toxoid--drug therapy--dt; toxoid--intramuscular drug administration--im; toxoid --pharmacology--pd; trimethoprim--adverse drug reaction--ae; trimethoprim --drug comparison--cm; unindexed drug... .

Medical Descriptors:

\* . . .therapy--dt; \*bacterial infection--etiology--et; \*bacterial infection--prevention--pc; \*bacterial infection--side effect--si; \* Clostridium difficile

18/3\_K/39 (Item 22 from file: 73) Links

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0079829238 EMBASE No: 2004014004  
Recurrent Clostridium difficile colitis

Yinelenen Clostridium difficile koliti

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Corresp. Author/Affil: Joyce A.M.: Gastroenterology, Lahey Clinic, Burlington, MA, United States

SENDROM ( SENDROM ) ( Turkey ) November 1, 2003 , 15/11 (40-46)

CODEN: SENDE ISSN: 1016-5134

Document Type: Journal ; Review Record Type: Abstract

Language: Turkish Summary language: English; Turkish

Number of References: 22

Recurrent Clostridium difficile colitis

Yinelenen Clostridium difficile koliti

Issue Title:

thought to be due to the persistence of C difficile spores. Treatment can be difficult. Oral vancomycin or metronidazole for 10 to 14 days may be helpful as first-line therapy...

Drug Descriptors:

clostridiumdifficile.txt

\*

antibiotic agent; bacterial toxin; Clostridium difficile toxin A; Clostridium difficile toxin B; metronidazole--drug therapy--dt; probiotic agent--drug therapy--dt; vancomycin--drug therapy--dt

Medical Descriptors:

\* Clostridium difficile; \*pseudomembranous colitis--diagnosis --di; \*pseudomembranous colitis--drug therapy--dt; \*pseudomembranous colitis--epidemiology--ep; \*pseudomembranous colitis...

18/3,K/40 (Item 23 from file: 73) Links

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0079637926 EMBASE No: 2003346197

Antibiotic associated diarrhoea: Infectious causes

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Indian Journal of Medical Microbiology ( Indian J. Med. Microbiol. ) ( India ) January 1, 2003 , 21/1 (6-11)

CODEN: IJMMEE ISSN: 0255-0857

Document Type: Journal ; Review Record Type: Abstract

Language: English Summary language: English

Number of References: 47

Nearly 25% of antibiotic associated diarrhoeas (AAD) is caused by Clostridium difficile, making it the commonest identified and treatable pathogen. Other pathogens implicated infrequently include Clostridium perfringens... ...and specific diagnostic test for C. difficile infection is tissue culture assay for cytotoxicity of toxin B. Commercial ELISA kits are available. Though less sensitive, they are easy to perform and are ... ...that is needed for control of mild to moderate cases. For severe cases of AAD, oral metronidazole is the first line of treatment, and oral vancomycin is the second choice. Probiotics have been used for recurrent cases.

Drug Descriptors:

\*

...ec; carbohydrate--endogenous compound--ec; cephalosporin--adverse drug reaction--ae; clindamycin--adverse drug reaction--ae; Clostridium difficile toxin A--endogenous compound--ec; Clostridium difficile toxin B--endogenous compound--ec; metronidazole--drug therapy--dt; metronidazole--oral drug administration--po; probiotic agent--drug therapy--dt; vancomycin--drug therapy--dt; vancomycin--oral drug administration--po

Medical Descriptors:

bacterium culture; bacterium identification; bile acid synthesis; Candida; carbohydrate metabolism; clinical feature; Clostridium difficile; Clostridium perfringens; colitis--side effect--si; cytotoxicity; diagnostic test; disease association; disease control; disease severity...

Orig. Descriptors:

18/3,K/41 (Item 24 from file: 73) Links

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0079197124 EMBASE No: 2002360919

Clostridium difficile

Stoddart B.; Wilcox M.H.

*clostridium difficile.txt*

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Current Opinion in Infectious Diseases ( Curr. Opin. Infect. Dis. ) ( United Kingdom ) October 1, 2002 , 15/5 (513-518)

CODEN: COIDE ISSN: 0951-7375

Document Type: Journal ; Review Record Type: Abstract

Language: English Summary language: English

Number of References: 51

*Clostridium difficile*

*Clostridium difficile* is the most commonly identified infective cause of antibiotic associated diarrhoea. Broad spectrum antibiotics, are... . . . . . based cytotoxin assays have been compared to rapid immunoassays, which are less effective, especially since toxin A negative, toxin B positive strains have been shown to be truly virulent. Details of colonization and adherence mechanisms... . . . . . strategies. These include a toxin binding polymer and ongoing biotherapy research. An antibody rise to toxin A during an episode of *C. difficile* diarrhoea protects against recurrence, and trials are in progress ...

Drug Descriptors:

\* antibiotic agent--drug therapy--dt; cephalosporin; clarithromycin; clindamycin; *Clostridium difficile* toxin A; *Clostridium difficile* toxin B; *Clostridium* toxin; cytotoxin; metronidazole--drug administration--ad; metronidazole--drug therapy--dt; metronidazole--intravenous drug administration--iv; metronidazole--oral drug administration--po; penicillin derivative; polymer--clinical trial --ct; polymer--drug therapy--dt; polymer--oral drug administration--po; polymer--pharmacology--pd; probiotic agent--clinical trial--ct; probiotic agent--drug therapy--dt; probiotic agent--oral drug administration--po; quinoline derived antiinfective agent; toxoid--clinical trial--ct; toxoid --drug therapy--dt; unclassified drug; vancomycin--drug administration--ad; vancomycin--drug therapy--dt; vancomycin --intragastric drug administration--ig; vancomycin--oral drug administration--po

Medical Descriptors:

\* *Clostridium difficile*; \*diarrhea--diagnosis--di; \*diarrhea --drug resistance--dr; \*diarrhea--drug therapy--dt; \*diarrhea--epidemiology --ep; \*diarrhea...

18/3,K/42 (Item 25 from file: 73) Links

Fulltext available through: STIC Full Text Retrieval Options

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0078913473 EMBASE No: 2002077151

5-Fluorouracil-induced colitis - A review based upon consideration of 6 cases

5-Fluorouracil-assoziierte kolitis - Eine ubersicht unter berucksichtigung einer eigenen sammlung von 6 fallen

Madisch A.; Wiedbrauck F.; Marquard F.; Stolte M.; Hotz J.

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Zeitschrift fur Gastroenterologie ( Z. Gastroenterol. ) ( Germany ) March 9, 2002 , 40/2 (59-66)

CODEN: ZGASA ISSN: 0044-2771

*clostridium difficile.txt*

Item Identifier (DOI): 10.1055/s-2002-20209

Document Type: Journal ; Article Record Type: Abstract

Language: German Summary language: English; German

Number of References: 30

... evacuations/per day). The stool cultures were negative and there were no proof both of *Clostridium difficile* and his toxin A and B. In 4 patients colonoscopy showed different grades of colitis up to diffuse erythema...

Drug Descriptors:

\* ...cb; folinic acid--drug therapy--dt; glucocorticoid--drug combination--cb ; glucocorticoid--drug therapy--dt; glucocorticoid--oral drug administration--po; metronidazole--drug combination--cb; metronidazole--drug therapy--dt; metronidazole--intravenous drug administration--iv; prednisolone--drug combination--cb; prednisolone --drug therapy--dt; prednisolone--oral drug administration --po; probiotic agent--drug combination--cb; probiotic agent --drug therapy--dt; vancomycin--drug combination--cb; vancomycin--drug therapy--dt; vancomycin--oral drug administration--po

Medical Descriptors:

...antibiotic therapy; apoptosis; article; bacterial infection--diagnosis --di; cancer palliative therapy; clinical article; clinical feature; *Clostridium difficile*; colonoscopy; corticosteroid therapy; diarrhea--complication--co; differential diagnosis; disease course; disease severity; drug megadose; feces...

Orig. Descriptors:

18/3, K/43 (Item 26 from file: 73) Links

Fulltext available through: STIC Full Text Retrieval Options

EMBASE

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0078387304 EMBASE No: 2000436914

Treatment and prevention of antibiotic associated diarrhea

Bergogne-Berezin E.

University Paris 7, Microbiology Department, 100 bis rue du Cherche-Midi, 75006 Paris, France

Author email: berezbiol@aol.com

Corresp. Author/Affil: Bergogne-Berezin E.: University Paris 7, Microbiology Department, 100 bis rue du Cherche-Midi, 75006 Paris, France

Corresp. Author Email: berezbiol@aol.com

International Journal of Antimicrobial Agents ( Int. J. Antimicrob. Agents ) ( Netherlands ) December 1, 2000 , 16/4 (521-526)

CODEN: IAAGE ISSN: 0924-8579

Publisher Item Identifier: S0924857900002934

Item Identifier (DOI): 10.1016/S0924-8579(00)00293-4

Document Type: Journal ; Article Record Type: Abstract

Language: English Summary language: English

Number of References: 25

...5 to 25%. The major form of intestinal disorders is the pseudomembranous colitis associated with *Clostridium difficile* which occurs in 10-20% of all AAD. In most cases of AAD discontinuation or... ...of vancomycin therapy) had a significant decrease in *C. difficile* colony-forming units, and of toxin B production. In several clinical randomised trials (versus placebo), *S. boulardii* has demonstrated its effectiveness by...

Drug Descriptors:

\* ...agent--adverse drug reaction--ae; \*antibiotic agent--clinical trial--ct; \*antibiotic agent--drug therapy--dt; \**Clostridium difficile* toxin A--drug toxicity--to; \**Clostridium difficile* toxin A--endogenous compound--ec; \* *Clostridium difficile* toxin B--drug toxicity --to; \**Clostridium difficile* toxin B --endogenous compound--ec; \*probiotic agent--clinical trial--ct; \* probiotic agent--drug therapy--dt

clostridifficile.txt

...colestipol--clinical trial--ct; colestipol--drug therapy--dt; cotrimoxazole--drug therapy--dt; cotrimoxazole--parenteral drug administration--pa; cytotoxin--drug toxicity--to; cytotoxin --endogenous compound--ec; enterotoxin--drug toxicity--to; enterotoxin --endogenous compound--ec; fusidic acid--clinical trial--ct; fusidic acid --drug therapy--dt; fusidic acid--oral drug administration --po; metronidazole--clinical trial--ct; metronidazole--drug therapy--dt; metronidazole--oral drug administration--po; quinolone derivative--drug therapy--dt; teicoplanin--clinical trial--ct; teicoplanin --drug therapy--dt; teicoplanin--oral drug administration--po ; tetracycline derivative--drug therapy--dt; tetracycline derivative-- oral drug administration--po; vancomycin--clinical trial--ct; vancomycin--drug therapy--dt; vancomycin--oral drug administration--po

Medical Descriptors:

article; *Bifidobacterium longum*; clinical trial; *Clostridium difficile*; colony forming unit; disease severity; drug efficacy; drug safety; drug withdrawal; *Enterococcus faecium*; hospital hygiene...

Orig. Descriptors:

18/3\_K/44 (Item 27 from file: 73) Links

Fulltext available through: STIC Full Text Retrieval Options

EMBASE

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0077673666 EMBASE No: 1999159858

*Clostridium difficile* infection in children

McGowan K.L.; Kader H.A.

Department of Pediatrics, Division of Infectious Diseases, Children's Hospital of Philadelphia, Philadelphia, PA 19104, United States

Corresp. Author/Affil: McGowan K.L.: Department of Pediatrics, Division of Infectious Diseases, Children's Hospital of Philadelphia, Philadelphia, PA 19104, United States

Clinical Microbiology Newsletter ( Clin. Microbiol. News1. ) ( United States ) April 1, 1999 , 21/7 (49-53)

CODEN: CMNEE ISSN: 0196-4399

Item Identifier (DOI): 10.1016/S0196-4399(99)80016-6

Document Type: Journal ; Review Record Type: Citation

Language: English

Number of References: 36

*Clostridium difficile* infection in children

Drug Descriptors:

\* anion exchange resin; antibiotic agent--adverse drug reaction--ae; antibiotic agent--drug administration--ad; antibiotic agent--drug therapy--dt; antibiotic agent--pharmacokinetics--pk; antineoplastic agent; *Clostridium difficile* toxin A; *Clostridium difficile* toxin B; colestyramine; cytotoxin; enterotoxin; immunoglobulin A--endogenous compound--ec; metronidazole--adverse drug reaction--ae; metronidazole--drug administration--ad; metronidazole--drug therapy--dt; metronidazole --pharmacokinetics--pk; neurokinin--endogenous compound--ec; receptor --endogenous compound--ec; vancomycin--adverse drug reaction--ae; vancomycin--drug administration--ad; vancomycin--drug therapy--dt; vancomycin--pharmacokinetics--pk; virulence factor

Medical Descriptors:

\* bacterial infection--diagnosis--di; \*bacterial infection--drug therapy--dt; \*bacterial infection--therapy--th; \**Clostridium difficile* bacterial colonization; bacterium culture; breast feeding; breast milk; colitis--side effect--si; cost effectiveness analysis; dehydration--complication--co; diarrhea--side effect--si; drug... . . . linked immunoassay; gastrointestinal symptom--side effect--si; human; *Lactobacillus*; nephrotoxicity--side effect--si; nonhuman; oral drug administration; receptor binding; relapse; review; *Saccharomyces boulardii*; symptomatology

clostridium\_difficile.txt

18/3,K/45 (Item 28 from file: 73) Links

Fulltext available through: STIC Full Text Retrieval Options

EMBASE

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0077369538 EMBASE No: 1998279739

Clostridium difficile infection. Current problems

Infezione da Clostridium difficile. Aspetti attuali

Fulgione V.

Via Fara Sabina, 1, 00199 Roma, Italy

Corresp. Author/Affil: Fulgione V.: Via Fara Sabina, 1, 00199 Roma, Italy

Recenti Progressi in Medicina ( Recenti Prog. Med. ) ( Italy ) September 5, 1998 , 89/7-8 (385-394)

CODEN: RPMDA ISSN: 0034-1193

Document Type: Journal ; Review Record Type: Abstract

Language: Italian Summary language: English; Italian

Number of References: 67

Clostridium difficile infection. Current problems

Infezione da Clostridium difficile. Aspetti attuali

Issue Title:

Clostridium difficile is a gram-positive anaerobe that forms subterminal spores. It is now one of major... ...the natural microflora has been modified by antibiotic therapy. Toxigenic strains of *C. difficile* produce toxin A (enterotoxin) or toxin B (citoxin) or both which cause the citoxin cause the citoxin effect 'rounding'. *C. difficile* can... ...diarrhea (antibiotic associated diarrhea) to fatal pseudomembranous colitis (PMC). The current therapy is based on oral administration of metronidazole or vancomycin. In patients non responders or that continue to relapse can be used other forms of therapy: antibiotic (teicoplanine, bacitracine, rifamixine); anion exchange resin (colestipol, colestiramine); probiotic therapy (*S. boulardii*, *Lactobacilli* and fecal enemas). New and improved studies will lead to new ...

Drug Descriptors:

\* bacitracin--drug therapy--dt; \*metronidazole--drug administration --ad; \*metronidazole--drug therapy--dt; \*teicoplanin--drug therapy--dt; \* vancomycin--drug administration--ad; \*vancomycin--drug therapy--dt antibiotic agent--drug therapy--dt; clostridium difficile toxin a--drug toxicity--to; clostridium difficile toxin b--drug toxicity--to; unclassified drug

Medical Descriptors:

\* clostridium difficile; \*gram negative infection--drug therapy --dt

18/3,K/46 (Item 1 from file: 155) Links

Fulltext available through: STIC Full Text Retrieval Options

MEDLINE(R)

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16330582 PMID: 15822561

Tylosin-responsive chronic diarrhea in dogs.

Westermarck Elias; Skrzypczak Teresa; Harmoinen Jaana; Steiner Jorg M; Riaux Craig G; Williams David A; Eerola Erkki; Sundback Pernilla; Rinkinen Minna  
Department of Clinical Veterinary Sciences, Faculty of Veterinary Medicine, University of Helsinki, Helsinki, Finland. elias.westermarck@helsinki.fi  
Journal of veterinary internal medicine / American College of Veterinary Internal Medicine ( United States ) Mar-Apr 2005 , 19 (2) p177-86 , ISSN: 0891-6640--Print Journal Code: 8708660

Publishing Model Print

Document type: Clinical Trial; Journal Article; Research Support, Non-U.S. Gov't

Languages: ENGLISH

clostrdifficile.txt

Main Citation Owner: NLM

Record type: MEDLINE; Completed

...diarrhea in all dogs within 3 days and in most dogs within 24 hours. Tylosin administration controlled diarrhea in all dogs, but after it was discontinued, diarrhea reappeared in 12 (85... 14 dogs within 30 days. Prednisone given for 3 days did not completely resolve diarrhea. Probiotic Lactobacillus rhamnosus GG did not prevent the relapse of diarrhea in any of 9 dogs....bacteria (*Salmonella* spp., *Campylobacter* spp., *Yersinia* spp., or *Lawsonia intracellularis*), and *Clostridium perfringens* enterotoxin and *Clostridium difficile* A toxin. A possible etiologic factor is a specific enteropathogenic organism that is a common resident in the... (

18/3,K/47 (Item 2 from file: 155) Links

Fulltext available through: STIC Full Text Retrieval Options

MEDLINE(R)

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12762651 PMID: 9691734

[*Clostridium difficile* infections. Current aspects]

Infezione da *Clostridium difficile*. Aspetti attuali.

Fulgione V

II Divisione Medica, Azienda Ospedaliera S. Filippo Neri, Roma.

Recenti progressi in medicina ( ITALY ) Jul-Aug 1998 , 89 (7-8) p385-94 , ISSN: 0034-1193--Print Journal Code: 0401271

Publishing Model Print

Document type: English Abstract; Journal Article; Review

Languages: ITALIAN

Main Citation Owner: NLM

Record type: MEDLINE; Completed

[*Clostridium difficile* infections. Current aspects]

Infezione da *Clostridium difficile*. Aspetti attuali.

*Clostridium difficile* is a gram-positive anaerobe that forms subterminal spores. It is now one of major... the natural microflora has been modified by antibiotic therapy. Toxigenic strains of *C. difficile* produce toxin A (enterotoxin) or toxin B (cytotoxin) or both with cause the cytotoxic effect "rounding". *C. difficile* can spread from patient... diarrhea (antibiotic associated diarrhea) to fatal pseudomembranous colitis (PMC). The current therapy is based on oral administration of metronidazole or vancomycin . In patients non responders or that continue to relapse can be used other forms of therapy: antibiotic (teicoplanine, bacitracine, rifamixine); anion exchange resin (colestipol, colestiramine); probiotic therapy (*S. boulardii*, *lactobacilli* and fecal enemas). New and improved studies will lead to new ... (

Descriptors: \**Clostridium difficile*; \*Enterocolitis, Pseudomembranous

18/3,K/48 (Item 3 from file: 155) Links

Fulltext available through: STIC Full Text Retrieval Options

MEDLINE(R)

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08424057 PMID: 3679541

Immunization of adult hamsters against *Clostridium difficile* -associated ileocectitis and transfer of protection to infant hamsters.

Kim P H; Iaconis J P; Rolfe R D

Department of Microbiology, Texas Tech University Health Sciences Center, Lubbock 79430.

Infection and immunity ( UNITED STATES ) Dec 1987 , 55 (12) p2984-92 , ISSN: 0019-9567--Print Journal Code: 0246127

Contract/Grant No.: R01-A121489; United States PHS

Publishing Model Print

clostridiumdifficile.txt

Document type: Journal Article; Research Support, U.S. Gov't, P.H.S.

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Immunization of adult hamsters against Clostridium difficile -associated ileocecalis and transfer of protection to infant hamsters.

In this investigation, the role of antibodies against Clostridium difficile toxins A and B in protecting hamsters against C. difficile-associated ileocecalis was examined. We... ...against disease. Neutralizing antibodies to toxins A and B could be demonstrated in both maternal milk and serum, as well as in infant serum and intestinal contents. Foster-mothering experiments demonstrated... ...protection of infants against C. difficile-associated ileocecalis was transferred to infant hamsters through breast milk. These results suggest that toxin A may play a more important role in the pathogenesis of C. difficile-associated ileocecalis in hamsters than toxin B. Furthermore, variations in the severity of C. difficile-associated illness in infants and adults may... (

Descriptors: ; Administration, Oral; Animals; Antibodies, Bacterial --analysis--AN; Bacterial Toxins--immunology--IM; Cricetinae; Enzyme-Linked Immunosorbent Assay; Immunization; Milk--immunology--IM; Pregnancy

Named Person:

18/3,K/49 (Item 1 from file: 156) Links

Fulltext available through: STIC Full Text Retrieval Options

ToxFile

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3459817 NLM Doc No: 9691734

[Clostridium difficile infections. Current aspects]

Infezione da Clostridium difficile. Aspetti attuali.

Fulgione V

II Divisione Medica, Azienda Ospedaliera S. Filippo Neri, Roma.

Journal Name: Recenti progressi in medicina ( ITALY ) Pub. Year: Jul-Aug 1998 89 (7-8) p385-94 , ISSN: 0034-1193 Print Journal Code: 0401271

Publishing Model Print

Document type: English Abstract; Journal Article; Review

Languages: ITALIAN

Main Citation Owner: NLM

Record type: MEDLINE; Completed

[Clostridium difficile infections. Current aspects]

Infezione da Clostridium difficile. Aspetti attuali.

Clostridium difficile is a gram-positive anaerobe that forms subterminal spores. It is now one of major... ...the natural microflora has been modified by antibiotic therapy. Toxigenic strains of C. difficile produce toxin A (enterotoxin) or toxin B (cytotoxin) or both with cause the cytotoxic effect "rounding". C. difficile can spread from patient... ...diarrhea (antibiotic associated diarrhea) to fatal pseudomembranous colitis (PMC). The current therapy is based on oral administration of metronidazole or vancomycin . In patients non responders or that continue to relapse can be used other forms of therapy: antibiotic (teicoplanine, bacitracine, rifamixine); anion exchange resin (colestipol, colestiramine); probiotic therapy (S. boulardii, lactobacilli and fecal enemas). New and improved studies will lead to new ... (

Descriptors: \*Clostridium difficile; \*Enterocolitis, Pseudomembranous

18/3,K/50 (Item 1 from file: 399) Links

CA SEARCH(R)

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142435738

CA: 142(23)435738y

PATENT

Page 91

**clostridifficile.txt**

Oral compositions containing a meat extract and peptones for moderating the effect of endotoxins

Inventor (Author): Corthesy-Theulaz, Irene; Fotopoulos, Grigorios; Bergonzelli, Gabriela

Location: Switz.

Assignee: Nestec S.A.

Patent: PCT International ; WO 200539606 A2 Date: 20050506

Application: WO 2004EP11416 (20041012) \*EP 200323016 (20031013)

Pages: 13 pp.

CODEN: PIXXD2

Language: English

**Patent Classifications:**

Class: A61K-035/12A; A61P-001/00B; A61K-035/72B

Designated Countries: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BW; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; EG; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NA; NI; NO; NZ; OM; PG; PH; PL; PT; RO; RU; SC; SD; SE; SG; SK; SL; SY; TJ; TM; TN; TR; TT; TZ; UA; UG; US; UZ; VC; VN; YU; ZA; ZM; ZW

Designated Regional: BW; GH; GM; KE; LS; MW; MZ; NA; SD; SL; SZ; TZ; UG; ZM; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM; AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL; PL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG

18/3,K/51 (Item 2 from file: 399) Links

CA SEARCH(R)

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126211021 CA: 126(16)211021r PATENT

Avian antitoxins to Clostridium difficile toxin A

Inventor (Author): Williams, James A.; Kink, John A.; Clemens, Christopher M.; Carroll, Sean B.

Location: USA

Assignee: Ophidian Pharmaceuticals, Inc.

Patent: United States ; US 5601823 A Date: 19970211

Application: US 161907 (19931202) \*US 429791 (19891031) \*US 985321 (19921204)

Pages: 43 pp. Cont.-in-part of U.S. Ser. No. 985, 321.

CODEN: USXXAM

Language: English

**Patent Classifications:**

Class: 424167100; A61K-039/395A; C07K-016/02B; C07K-016/12B

18/3,K/52 (Item 1 from file: 135) Links

NewsRx Weekly Reports

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0000603913 (USE FORMAT 7 OR 9 FOR FULLTEXT)

New gastroenterology research from Canada, Japan and the United States described

Health & Medicine Week, August 27, 2007, p.4819

DOCUMENT TYPE: Expanded Reporting LANGUAGE: English  
RECORD TYPE: FULLTEXT

Word Count:  
1193

clostridifficile.txt

... *Eimeria* species are intracellular protozoa that infect intestinal epithelia of most vertebrates, causing coccidiosis. Intestinal intra-epithelial lymphocytes (IEL) that reside at the basolateral site of epithelial cells (EC) have immunoregulatory...

...induced change by cytokine production but also in direct interaction with the epithelial barrier when intra-EC junctions are down-regulated." Inagaki-Ohara and associates published their study in Infection and...

...2 mitogen-activated protein kinase activation both in vitro and in vivo and protects against *Clostridium difficile* toxin A-induced enteritis. According to recent research from the United States, " *Saccharomyces boulardii* (Sb), a probiotic yeast, protects against intestinal injury and inflammation caused by a wide variety of enteric pathogens, including *Clostridium difficile*. Given the broad range of protective effects of Sb in multiple gastrointestinal disorders, we hypothesize...

...we found that Sb culture supernatant (Sbs) inhibits interleukin-8 production induced by *C. difficile* toxin A or IL-1 beta in human colonocyte NCM460 cells in a dose-dependent fashion," said...

...and colleagues at Harvard University and Boston University. "Furthermore, Sbs inhibited IL-1 beta and toxin A induced Erk1/2 and JNK/SAPK but not p38 activation in NCM460 cells. To test...

...or intestinal histology," they reported. "However, Erk1/2 activation was significantly inhibited by Sbs in toxin A exposed mouse ileal mucosa. In control loops, toxin A increased fluid secretion (2.2-fold), histological score (3.3-fold), and levels of the chemokine KC (4.5-fold). Sbs pretreatment completely normalized toxin A mediated fluid secretion (p<0.01), and histopathologic changes (p<0.01) and substantially inhibited toxin A-associated KC increases (p<0.001)." "In summary, the probiotic yeast *S. boulardii* inhibits *C. difficile* toxin A-associated enteritis by blocking the activation of Erk1/2 MAP kinases," the researchers concluded. "This..."

...2 mitogen-activated protein kinase activation both in vitro and in vivo and protects against *Clostridium difficile* toxin A-induced enteritis. J Biol Chem, 2006;281(34):24449-24454). For additional information, contact Ciaran...

...MA 02215, USA. E-mail: ckelly2@bidmc.harvard.edu. Keywords: Boston, Massachusetts, United States, Gastroenterology, *Clostridium difficile*, Enteritis, *Saccharomyces boulardii*, Proteomics. This article was prepared by Health & Medicine Week editors from staff...

18/3/K/53 (Item 2 from file: 135) Links  
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0000488887 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Research from University of Virginia, U.S., provides new scientific insights

clostridium difficile.txt

DOCUMENT TYPE: Expanded Reporting LANGUAGE: English  
RECORD TYPE: FULLTEXT

Word Count:  
1129

...TEXT: developing directions of research. Study 1: Investigators publish new data in the report "Update on Clostridium difficile associated disease." According to a study from the United States, "The aim of this article is to report recent changes in the epidemiology of Clostridium difficile associated disease. An epidemic of

of Clostridium difficile associated disease in Quebec was associated with a threefold increase in incidence and a sharp...

...strain (NAP1/027). This strain was found to produce greater than 10 times as much toxin A and toxin B as historic isolates and has been identified in many institutions throughout North America and Europe...

...spread of this strain as it is fluoroquinolone resistant. An increased rate of community-acquired Clostridium difficile -associated disease has also been noted and, in some cases, without prior antibiotic exposure. Although some studies have suggested an increased failure rate of metronidazole in Clostridium difficile associated disease, it remains the recommended first line treatment for uncomplicated cases. Other antibiotics, a toxin binder, probiotic agents and a vaccine are being tested in clinical trials for efficacy in prevention and treatment of Clostridium difficile associated disease," wrote J. Cloud and colleagues, University of Virginia, Digestive Health Center of Excellence. The researchers concluded: "The recent increase in the incidence and severity of Clostridium difficile associated disease may be related, at least in part, to the emergence of a highly...

...027 strain." Cloud and colleagues published their study in Current Opinion In Gastroenterology (Update on Clostridium difficile associated disease. Current Opinion In Gastroenterology, 2007;23(1):4-9). For more information, contact...

...diabetes group (26- and 6-fold over control, respectively) were markedly reduced by continuous subcutaneous administration of ATL146e (10 ng&kg  $^{-1} \text{min}^{-1}$ ), a selective A agonist. The increase in...

18/3, K/54 (Item 3 from file: 135) Links  
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0000447935 (USE FORMAT 7 OR 9 FOR FULLTEXT)

New data from Harvard University, U.S., studies illuminate research

Life Science weekly, February 20, 2007, p.2014

DOCUMENT TYPE: Expanded Reporting LANGUAGE: English  
RECORD TYPE: FULLTEXT

clostridium difficile.txt

Word Count:  
1265

... 6 months of clinical and imaging follow-up." "Patients with irregular cycles and those on oral contraceptives were excluded. Data prospectively documenting the date of the last menstrual period (LMP) at...  
...2 mitogen-activated protein kinase activation both in vitro and in vivo and protects against Clostridium difficile toxin A-induced enteritis.

According to recent research from the United States, " Saccharomyces boulardii (Sb), a probiotic yeast, protects against intestinal injury and inflammation caused by a wide variety of enteric pathogens, including Clostridium difficile . Given the broad range of protective effects of Sb in multiple gastrointestinal disorders, we hypothesize... .

...we found that Sb culture supernatant (Sbs) inhibits interleukin-8 production induced by C. difficile toxin A or IL-1 beta in human colonocyte NCM460 cells in a dose-dependent fashion," said...

...and colleagues at Harvard University and Boston University. "Furthermore, Sbs inhibited IL-1 beta and toxin A induced Erk1/2 and JNK/SAPK but not p38 activation in NCM460 cells. To test...

...or intestinal histology," they reported. "However, Erk1/2 activation was significantly inhibited by Sbs in toxin A exposed mouse ileal mucosa. In control loops, toxin A increased fluid secretion (2.2-fold), histological score (3.3-fold), and levels of the chemokine KC (4.5-fold). Sbs pretreatment completely normalized toxin A mediated fluid secretion (p<0.01), and histopathologic changes (p<0.01) and substantially inhibited toxin A-associated KC increases (p<0.001)."

"In summary, the probiotic yeast S. boulardii inhibits C. difficile toxin A-associated enteritis by blocking the activation of Erk1/2 MAP kinases," the researchers concluded. "This...

...2 mitogen-activated protein kinase activation both in vitro and in vivo and protects against Clostridium difficile toxin A-induced enteritis. J Biol Chem, 2006;281(34):24449-24454).

For additional information, contact Ciaran...

18/3,K/55 (Item 1 from file: 357) Links

Derwent Biotech Res.

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0421438 DBA Accession No.: 2007-07376 PATENT

Inactivating target gene in Clostridium difficile host cell, involves introducing plasmid which is unstable in C. difficile into host cell; and allowing homologous recombination between the C. difficile DNA in the plasmid and host cell recombinant Clostridium difficile for use in gene therapy and recombinant vaccine for infection therapy

Author: ROOD J I; LYRAS D; OCONNOR J R

Patent Assignee: UNIV MONASH 2006

Patent Number: WO 2006130925 Patent Date: 20061214 WPI Accession No.: 2007-184081 ( 200718 )

Priority Application Number: AU 2005903063 Application Date: 20050610

National Application Number: WO 2006AU800 Application Date: 20060609

Language: English

Inactivating target gene in Clostridium difficile host cell, involves introducing plasmid which is unstable in C. difficile into host cell; and allowing homologous recombination between the C. difficile DNA in the plasmid and host cell recombinant Clostridium difficile for use in gene therapy and recombinant vaccine for infection therapy

**Abstract:** DERTWENT ABSTRACT: NOVELTY - A method of inactivating target gene in a Clostridium difficile host cell, involves introducing plasmid which is unstable in C. difficile, into the host cell... ...removing the selective conditions. DETAILED DESCRIPTION - A method (M1) of inactivating target gene in a Clostridium difficile host cell, involves introducing plasmid which is unstable in C. difficile into the host cell... ...antibiotic resistance marker is catP. Preferred Composition: The composition is a vaccine composition or a probiotic composition and it further comprises an adjuvant. ACTIVITY - Antidiarrhetic; Antibacterial. No biological data is given... ...which encodes a protein involved in virulence of C. difficile or a gene which encodes toxin A, toxin B or a factor (selected from the group consisting of promoters of the genes for toxin A and toxin B, sigma factors and anti-sigma factors) which regulates the expression of one or both of these toxins to form new strains, useful in pharmaceutical compositions e.g. vaccine or probiotic composition or in the manufacture of a medicament for the treatment or prophylaxis of a condition associated with C. difficile (claimed) particularly C. difficile associated diarrhoea. ADMINISTRATION - Administered orally, intranasally or parenterally e.g. subcutaneously or intramuscularly. No dosage is given. ADVANTAGE - The... ...genes. This helps in minimizing the number of antimicrobial resistance markers carried by any bacterial probiotic or attenuated vaccine intended for human consumption, and it eliminates the possibility that a recombinant... ...allows the highly efficient production and export of these polypeptides in hypoxic tissues after intravenous administration, or into the gut, particularly the colon, of the orally colonized individual for a variety of prophylactic or therapeutic uses. The combination of vaccine with additional oral administration of an attenuated, non-toxigenic C. difficile strain prevents uninfected patients from being colonized, and...

E.C. Numbers:

Descriptors: Clostridium difficile toxin-A, toxin- B target gene inactivating, plasmid pJIR2512, plasmid pJIR2515, plasmid pJIR2363, plasmid pJIR2364, plasmid pJIR2633, plasmid pJIR2634...

18/3,K/56 (Item 2 from file: 357) Links

Derwent Biotech Res.

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0377182 DBA Accession No.: 2005-22888 PATENT

Increasing production of immunoglobulin A in milk of ruminant mammal, involves immunizing mammal with antigen to stimulate secretion of immunoglobulin A in milk, and collecting milk from mammal on once-daily basis heat-killed Candida albicans cell for attenuated vaccine and increased animal milk antibody production

Author: FARR V C; PROSSER C G

Patent Assignee: AGRESEARCH LTD 2005

Patent Number: WO 200570458 Patent Date: 20050804 WPI Accession No.: 2005-542231 (200555)

Priority Application Number: NZ 204Z-530709 Application Date: 20040121

National Application Number: WO 2005NZ4 Application Date: 20050121

Language: English

Increasing production of immunoglobulin A in milk of ruminant mammal, involves immunizing mammal with antigen to stimulate secretion of immunoglobulin A in milk, and collecting milk from mammal on once-daily basis heat-killed Candida albicans cell for attenuated vaccine and increased animal milk antibody production

**Abstract:** DERTWENT ABSTRACT: NOVELTY - Increasing (M1) the production of immunoglobulin A (IgA) in the milk of a ruminant mammal, comprising immunizing the mammal with an antigen to stimulate secretion of IgA in milk, and collecting milk

clostrdifficile.txt

from the mammal on a once-daily basis, is new. DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for ruminant milk (I) for treatment of disease, comprising elevated levels of IgA, produced by immunizing the mammal with an antigen to stimulate secretion of IgA in milk, and collecting milk from the mammal on a once-daily basis, where the titre of IgA in the collected milk is greater than that obtained from either the immunizing step or collecting step alone. BIOTECHNOLOGY...  
...0:intramuscular (IM) in the neck, and intraperitoneal (IP); (b) week 4: IM, IP and intra mammary (IMM) in all four teats; (c) week 6; IMM; and (d) week 7: IM...  
...from Escherichia, Staphylococcus, Salmonella, Pneumococcus and their combinations, or chosen from E.coli, Staphylococcus sp., Clostridium difficile, Vibrio cholerae sp., Helicobacter pylori and their combinations. The yeast antigen is from the Candida, preferably...  
...Mycoplasma antigens are chosen from Mycoplasma pneumoniae, Cryptosporidium parvum and their combinations. The antigen is administered with one or more adjuvant, where the adjuvants are chosen from Freund's complete adjuvant (FCA), Freund's incomplete adjuvant (FIC) 65, cholera toxin B subunit, aluminum hydroxide, Bordetella pertussis, muramyl dipeptide, cytokines, saponin and their combinations. The antigen is... 750 ml/l; and sterile saline 249 ml/l. The IgA produced in the collected milk is substantially secretory IgA produced by plasma cells within the udder. The concentration of IgA...  
OF ACTION - Immunomodulator. USE - (M1) is useful for increasing the production of IgA in the milk of a ruminant mammal, where the mammal is a dairy cow. (I) is useful for...  
...treatment of inflammation. ADVANTAGE - (M1) increases the concentration and/or yield of IgA in the milk (claimed). (M1) enables increased production of higher value IgA product using decreased labour. (I) is...  
E.C. Numbers:

Descriptors: heat-killed Candida albicans cell antigen, Escherichia coli, Staphylococcus sp., Clostridium difficile, Vibrio cholerae, Helicobacter pylori, pollen, pesticide, insecticide, fungicide, toxin, tumor necrosis factor, insulin-like growth...  
...protein, conjugated protein antigen evaluation, immunization in ruminant mammal, adjuvant, appl. attenuated vaccine, increased animal milk IgA production, gut bacterium, virus infection, inflammation therapy, prevention, pharmaceutical, veterinary field fungus yeast bacterium...

18/3,K/57 (Item 1 from file: 149) Links

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03313733 Supplier Number: 165780453 (USE FORMAT 7 OR 9 FOR FULL TEXT )

Therapies on the way for new strain of C. difficile.(Clinical Rounds)

Bell, John R.

Skin & Allergy News , 38 , 6 , 73(1)

June ,

2007

Publication Format: Magazine/Journal

ISSN: 0037-6337

Language: English

Record Type: Fulltext Target Audience: Professional

Word Count: 730 Line Count: 00062

Text:

STOWE, VT. -- Although Clostridium difficile-associated diarrhea is now more severe and more drug resistant than before, because of the...

...identify it in a particular laboratory, This new variant produces 16 times the amount of toxin A as prior strains and 23 times the amount of toxin B as toxinotype 0 strains, said Dr. Pegram, who is also the director of the Infectious...

### clostridium difficile.txt

...called Rifaxam (ActivBiotics Inc.) is in phase II development, along with a monoclonal antibody to toxin A and B (Medarex Inc.). In addition, a toxoid vaccine is in phase I development (Acambis...).

...currently available include cholestyramine and colestipol.

Other weapons in the physician's arsenal are the oral antibiotic rifaximin (Xifaxan, Salix Pharmaceuticals), approved for E. coli-associated traveler's diarrhea in patients...

...Alinia, Romark Laboratories), approved for treatment of diarrhea caused by Giardia lamblia or Cryptosporidium parvum.

Probiotic agents including yogurt, yeast, and oral lactobacillus may also be effective, he noted. Brands of lactobacillus include Lactinex (Becton Dickinson) and...

...of two 250-mg capsules daily for 4-6 weeks.

In addition to pharmacologic and probiotic therapy, there remains the option of fecal transplantation to replenish the decimated gut flora, Dr...

#### Special Features:

#### Descriptors:

Clostridium difficile--...

...Clostridium difficile--...

...Clostridium difficile--

#### Geographic Codes:

18/3,K/58 (Item 2 from file: 149) Links

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03281919 Supplier Number: 164221801 (USE FORMAT 7 OR 9 FOR FULL TEXT )  
Consider newer therapies to treat new strain of C. difficile.(infectious Diseases)

Bell, John R.

Pediatric News , 41 , 5 , 22(1)

May ,

2007

Publication Format: Magazine/Journal

ISSN: 0031-398X

Language: English

Record Type: Fulltext Target Audience: Professional

Word Count: 896 Line Count: 00075

#### Text:

STOWE, VT. -- Although Clostridium difficile-associated diarrhea is now more severe and more drug resistant than before, because of the...

...identify it in a particular laboratory. This new variant produces 16 times the amount of toxin A as prior strains and 23 times the amount of toxin B as toxinotype 0 strains, said Dr. Pegram,

clostridium difficile.txt

who is also the director of the Infectious...

...called Rifaxen (ActivBiotics Inc.) is in phase II development, along with a monoclonal antibody to toxin A and B (Medarex Inc.). In addition, a toxoid vaccine is in phase I development (Acambis...).

...currently available include cholestyramine and colestipol.

Other weapons in the physician's arsenal are the oral antibiotic rifaximin (Xifaxan, Salix Pharmaceuticals), approved for *E. coli*-associated traveler's diarrhea in patients...

...Alinia, Romark Laboratories), approved for treatment of diarrhea caused by *Giardia lamblia* or *Cryptosporidium parvum*.

Probiotic agents including yogurt, yeast, and oral *Lactobacillus* may also be effective, he noted. Brands of *Lactobacillus* include Lactinex (Becton Dickinson) and...

...dosage of two 250-mg capsules daily for 46 weeks.

In addition to pharmacologic and probiotic therapy, there remains the option of fecal transplantation to replenish the decimated gut flora, Dr...

#### Special Features:

#### Descriptors:

*Clostridium difficile*--...

...*Clostridium difficile*--...

...*Clostridium difficile*--...

...*Clostridium difficile*--

#### Geographic Codes:

18/3,K/59 (Item 3 from file: 149) Links

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02942898 Supplier Number: 103377069 (USE FORMAT 7 OR 9 FOR FULL TEXT )  
Probiotics in health maintenance and disease prevention. (Probiotics).

Drisko, Jeanne A.; Giles, Cheryl K.; Bischoff, Bette J.  
Alternative Medicine Review , 8 , 2 , 143(13)

May ,  
2003

Publication Format: Magazine/Journal

ISSN: 1089-5159

Language: English

Record Type: Fulltext Target Audience: Academic; Professional  
Word Count: 6342 Line Count: 00667

Probiotic microflora display numerous health benefits beyond providing basic nutritional value. They cooperatively maintain a delicate

...  
...animals. (1) For example, Metchnikoff discovered and promoted *Lactobacillus bulgaricus* as an aid in souring milk products to extend their shelf life. Tissier demonstrated that *Bifidobacteria* were helpful in treating infant...

*clostrdifficile.txt*

...do not predominate in the bottle-fed infant. Breast-fed infants switched to cow's milk or solid foods colonize Bifidobacteria, Clostridia, Lactobacilli, Bacteroides, Streptococci, and enterics. (13)  
The type and...

...enhances immunoglobulin response to vaccines. (16) In addition, IgA response to rotavirus is enhanced by administration of *Lactobacillus* GG. (17) These reports confirm the positive effects of probiotics on innate and...

...enhanced the antibody response in adults receiving a typhoid vaccination. (22)

Another example of a probiotic enhancing the immune response can be seen in the activation of the reticuloendothelial system and...

...germ-free rats has been shown to decrease gut permeability to mannitol. (17) In addition, administration of *Lactobacillus* to interleukin-10 knockout mice decreased translocation of bacteria to extraintestinal sites and...

...urease production, a correlate of inflammation associated with chronic arthritis. (17)

There are several ways probiotic microflora can prevent pathogenic bacteria from adhering and colonizing gut mucosa. Probiotics disallow colonization by...

...pathogenic, acid sensitive bacteria. (5,13,20,25) Probiotics can also reduce the growth of *Clostridium difficile* and alter toxin receptors for *C. difficile* toxin-A through enzymatic actions on the receptor. (17)

The inhibition of pathogenic bacteria by probiotics is...

...in myriad conditions. Tables 1a and 1b summarize specific probiotics and their uses.

*Inflammation/Arthritis*

Probiotic supplementation has both direct and indirect effects. Probiotics exhibit direct effects locally in the GI...

...authors concluded that gut defense mechanisms are disturbed in chronic juvenile arthritis and suggested orally administered *Lactobacillus* GG has potential to reinforce mucosal barrier mechanisms in this disorder. When inflamed, the...

...and subsequent reduction in GI permeability can result from consuming probiotics. (16,17)

*Allergies/Eczema*

Probiotic bacteria are important in down-regulating inflammation associated with hypersensitivity reactions in patients with atopic eczema and food allergy. (15,27) Perinatal administration of *Lactobacillus rhamnosus* GG decreased subsequent occurrence of eczema in at-risk infants by one...

...in animal and human trials. (28-30) In mildly hypersensitive patients, probiotics down-regulated a milk-induced inflammatory response. (28) This was found to be secondary to prevention of increased receptor expression in monocytes and neutrophils. Interestingly, individuals in the same study without milk sensitivity were not found to have receptor down-regulation when taking probiotics.

Probiotics have also...

...with cystic fibrosis were found to have reduced severity of pneumonia when *Lactobacillus* GG was administered. It is possible that protection from respiratory disease is related to up-regulation of mucin...

clostridifficile.txt

...Disease

An interesting case report was published documenting the effect of a high potency, multicultured probiotic preparation in liver cirrhosis. (35) The probiotic preparation was identified as VSL #3, containing *Streptococcus thermophilus*, *Bifidobacteria*, *Lactobacillus acidophilus*, *L. plantarum*, *L...*

...*Streptococcus faecum* at a concentration of 10 (11) microflora per gram. The authors hypothesized that oral bacteriotherapy could improve microbial balance and lower portal pressure with a reduction in the risk...

...bleeding. A 76-year-old male patient with cirrhosis and esophageal varices was given the probiotic preparation for one month followed by a one-month washout period and a second one...

...with liver cirrhosis have altered microflora, over-populated with urea-splitting bacteria. On this basis, oral antibiotics are commonly administered to reduce the production of mediators involved in the pathogenesis of hepatic encephalopathy, portal hypertension, and variceal bleeding. The authors suggest that, instead of antibiotics, probiotics should be administered and demonstrate this could be a safe way to regulate portal pressure. They conclude that...

...general population. (24) Persons with lactose intolerance experience better digestion and tolerance of lactose in yogurt than that contained in milk. Viable cultures of lactic acid bacteria are speculated to be essential since pasteurization reduces the observed digestibility. Digestion of lactose in the gut lumen by lactase contained in yogurt bacteria is coupled with slower intestinal delivery or transit time of yogurt compared with milk. The replacement of milk with yogurt or fermented dairy products may allow for better digestion and decreased diarrhea and other symptoms...

...digestion of sucrose was demonstrated when *Saccharomyces cerevisiae*, a yeast containing the enzyme sucrase, was administered therapeutically. (24)

Diarrhea

One of the most well recognized uses of probiotics is for diarrheal

...

...of probiotics, doses, and different populations in these studies make generalizations difficult, it is clear probiotic agents are becoming an important tool in the treatment of gastrointestinal problems in infants and...

...diarrheal disorders, including rotavirus infection, traveler's diarrhea, and more serious bacterial infections such as *Clostridium difficile*, are treated with probiotics. (2,22,23,36-41) Importantly, studies using *Lactobacillus* species or...

...overgrowth of small bowel intestinal bacteria once it was established. (24)

In vitro studies demonstrate probiotic agents inhibit adherence of dysbiotic organisms to intestinal epithelial cells. This inhibition is hypothesized to...

...found to be most effective. This is consistent with a human clinical trial that reported oral administration of *L. acidophilus* was unable to suppress *H. pylori* or reduce inflammation in patients with...

...in non-specific vaginitis revealed symptomatic relief in the majority of women who used the probiotic vaginally. (34) In another study, 29 women were randomized to receive either *L. rhamnosus* GR...

## clostridiffficile.txt

...Candida albicans when compared to Lactobacillus rhamnosus GG alone. The investigators concluded that not all probiotic strains, even those of the same species, necessarily act similarly at the same site. (49) Other reports demonstrate efficacy of Lactobacillus acidophilus in treating vaginal Candida after oral use. The study points to vaginal contamination with fecal flora as the possible rationale for the effectiveness of this therapy. (17)

Both oral probiotics and vaginal suppositories of probiotics have been shown to reduce the incidence of recurrent urinary tract infection. (17,33)

### Neonatal Enterocolitis

A report by Caplan and Jilling found probiotic supplementation may be effective in preventing neonatal necrotizing enterocolitis (NEC). (8) The investigators developed a...

...of tumorigenesis that may ultimately act as a proto-oncogene or inactivate tumor suppressor genes. Administration of Lactobacillus GG has been shown to suppress bacterial enzyme activity such as (beta)-glucuronidase...

...at the University of Kansas Medical Center.

### Inflammatory Bowel Disease

It has been reported that probiotic combination therapies may benefit patients with inflammatory bowel disease. (7) Twenty-six patients received VSL...

...patients enrolled in the pharmaceutical-only arm relapsed while only one of 16 in the probiotic arm relapsed. Both Saccharomyces boulardii and Lactobacillus GG have been reported to increase secretory IgA...

...bowel disease has generated considerable interest. (52,53)

### Conclusion

Current evidence supports the concept that oral administration of probiotic therapies may be beneficial in a multitude of disorders both inside and outside the gastrointestinal...  
...6)

nonpathogenic strain in maintaining remission of  
(serotype 06:D5:H1) ulcerative colitis

of Lactobacillus a. Administration  
a. (22,40) ...Reduced diarrheal illness d. (22)  
in formula-fed toddlers  
e. Reduced occurrence of e. (39)  
Clostridium difficile  
diarrhea  
f. When co-administered  
with f. (10,22)  
antibiotics in children,  
non-Clostridium difficile  
antibiotic-associated  
diarrhea is reduced  
g. Reduced risk of g. (10,24)  
traveler's diarrhea...

...Reduced incidence of diarrhea a. (22)  
plantarum (299v and in daycare centers when  
DSM 9843) administered to only half of the  
children

b. Especially effective in b. (22; 40)  
reducing inflammation...

clostridifficile.txt

...models by

lactic acid secretion

Saccharomyces boulardii (yeast) a. Reduced recurrence of Clostridium difficile diarrhea b. (24) a. (39; 46)

b. Effects on *C. difficile* and *Klebsiella oxytoca* resulted in decreased risk...

...38)

i. Extends remission time of Crohn's disease  
j. Increased IgA anti-toxin A  
j. (59) responses in pretreated mice

Saccharomyces cerevisiae (a yeast... Enhanced digestion of sucrose (24)

...489-493.

(3.) Lucchini F, Kmet V, Cesena C, et al. Specific detection of a probiotic *Lactobacillus* strain in faecal samples by using multiplex PCR. FEMS Microbiol Lett 1998;158:273...

...1999;116:1246-1249.

(8.) Caplan MS, Jilling T. Neonatal necrotizing enterocolitis: possible role of probiotic supplementation. J Pediatr Gastroenterol Nutr 2000;30:S18-S22.

(9.) Gionchetti P, Rizzello F, Venturi A, et al. Oral bacteriotherapy as maintenance treatment in patients with chronic pouchitis: a double-blind, placebo-controlled trial...

...s disease. Dig Dis Sci 2000;45:1462-1464.

(12.) Kyne L, Kelly CP. Recurrent *Clostridium difficile* diarrhoea. Gut 2001;49:152-153.

(13.) Levy J. The effects of antibiotic use on...

...exogenous *Lactobacillus* strains. FEMS Microbiol Lett 1995;131:133-137.

(20.) Percival M. Choosing a probiotic supplement. Clin Nutr Insights 1997;6:1-4.

(21.) Hooper LV, Gordon JI. Commensal host...

...Suzuki N, Kabir AM, et al. Lactic acid-mediated suppression of *Helicobacter pylori* by the oral administration of *Lactobacillus salivarius* as a probiotic in a gnotobiotic murine model. Am J Gastroenterol 1998;93:2097-2101.

(26.) Malin M...

...probiotics. Lancet 2001;357:1057-1059.

(28.) Pelto L, Isolauri E, Lilius EM, et al. Probiotic bacteria down-regulate the milk-induced inflammatory response in milk-hypersensitive subjects but have an immunostimulatory effect in healthy subjects. Clin Exp Allergy 1998;28...

...Pessi T, Sutas Y, Hurme M, Isolauri E. Interleukin-10 generation in atopic children following oral *Lactobacillus rhamnosus* GG. Clin Exp Allergy 2000;30:1804-1808.

(31.) Cunningham-Rundles S, Ahrne...

...32.) Wagner RD, Warner T, Roberts L, et al. Colonization of congenitally immunodeficient mice with probiotic bacteria. Infect Immun

clostrdifficile.txt

1997;65:3345-3351.

(33.) Sanders ME, Klaenhammer TR. Invited review: the scientific basis of *Lactobacillus acidophilus* NCFM functionality as a probiotic. *J Dairy Sci* 2001;84:319-331.

(34.) No authors listed. *Lactobacillus sporogenes* monograph. *Altern*

...*Ant J Gastroenterol* 2000;95:S16-S18.

(39.) Pochapin M. The effect of probiotics on *Clostridium difficile* diarrhea. *Am J Gastroenterol* 2000;95:S11-S13.

(40.) Schultz M, Sartor RB. Probiotics and...

...2001;138:361-365.

(42.) Gorbach SL, Chang TW, Goldin B. Successful treatment of relapsing *Clostridium difficile* colitis with *Lactobacillus* GG. *Lancet* 1987;2:1519.

(43.) Biller JA, Katz AJ, Flores AF, et al. Treatment of recurrent *Clostridium difficile* colitis with *Lactobacillus* GG. *J Pediatr Gastroenterol Nutr* 1995;21:224-226.

(44.) LaMont JT...

...CM, McFarland LV, Greenberg RN, et al. The search for a better treatment for recurrent *Clostridium difficile* disease: use of high-dose vancomycin combined with *Saccharomyces boulardii*. *Clin Infect Dis* 2000;31

...

...*Clin Gastroenterol* 1998;27:99-100.

(57.) Guarino A, Canani RB, Spagnuolo MI, et al. Oral bacterial therapy reduces the duration of symptoms and of viral excretion in children with mild...

...Aboudola S, Warny M, et al. *Saccharomyces boulardii* stimulates intestinal immunoglobulin A immune response to *Clostridium difficile* toxin A in mice. *Infect Immun* 2001;69:2762-2765.

Jeanne Drisko, MD--University of Kansas Medical...

18/3,K/60 (Item 4 from file: 149) Links

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02597595 Supplier Number: 132238218 (USE FORMAT 7 OR 9 FOR FULL TEXT )  
*Clostridium difficile*--associated diarrhea.

Schroeder, Michael S.

American Family Physician , 71 , 5 , 921

March 1 ,

2005

Publication Format: Magazine/Journal; Refereed

ISSN: 0002-838X

Language: English

Record Type: Fulltext Target Audience: Professional

Word Count: 3764 Line Count: 00381

*Clostridium difficile*--associated diarrhea.

Text:

*Clostridium difficile* infection is responsible for approximately 3 million cases of diarrhea and colitis annually in the...

...of *C. difficile*-associated diarrhea includes discontinuation of the

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precipitating antibiotic (if possible) and the administration of metronidazole or vancomycin. Preventive measures include the judicious use of antibiotics, thorough hand washing...

...associated diarrhea was considered, and a stool sample was obtained for analysis.

Empiric treatment with oral metronidazole (Flagyl) and famotidine (Pepcid) was initiated. Shortly thereafter, the patient developed marked hypotension. Fluid...

...a dopamine (Intropin) drip was started. Moxifloxacin and doxycycline were discontinued, and treatment with oral vancomycin (Vancocin), intravenous metronidazole, and intravenous ceftizoxime (Cefizox); (anti-C. difficile-associated diarrhea therapy) was...

...the debilitated patient's inability to mount an IgG antibody immune response against C. difficile toxin A. (5) The ability to mount an immune response is not protective against C. difficile colonization...

...C. difficile causes toxin-mediated colitis. Pathogenic strains of C. difficile produce two protein exotoxins: toxin A and toxin B. (1) Toxin A activates macrophages and mast cells. Activation of these cells causes the production of inflammatory mediators, which leads to fluid secretion and increased mucosal permeability. (1) Toxin B has little enterotoxic activity but is extremely cytotoxic in vitro. C. difficile toxins also cause...

...otherwise healthy adults, the first step is to discontinue the precipitating antibiotic, if possible, and administer fluids and electrolytes to maintain hydration. With this conservative therapy, diarrhea can be expected to...

...85 percent. (19) Initial treatment of severe cases must be aggressive, with intravenous metronidazole and oral vancomycin used in combination. (11) If ileus occurs, vancomycin can be administered by nasogastric tube with intermittent clamping, retention enemas, or both. (23) If medical therapy fails...

...C. difficile-mediated disease by restricting the use of broad-spectrum antibiotics in their patients.

Probiotic use is a more controversial mode of prevention. Lactobacilli have been shown to reduce the...

...routinely, especially in patients at higher risk for severe disease.

TABLE 1

Risk Factors for Clostridium difficile-Associated

Diarrhea

Admission to intensive care unit

Advanced age

Antibiotic therapy

Immunosuppressive therapy

Multiple and...

...Use of antacids

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Information from references 4 and 6.

**TABLE 2**  
Selected Differential Diagnosis of Clostridium difficile-Associated Diarrhea

Disorder	Typical presentation
C. difficile-associated diarrhea	Recent history of antibiotic use, evidence...
...disease;	pain associated with eating

Information in part from reference 6.

**TABLE 3**  
Treatment of Clostridium difficile Colitis

Drug	Dosage	Mode of administration
Metronidazole (Flagyl)	500 mg orally every six to eight hours for 10 to 14 days Alternatives: 250...	Oral and IV
...mg	IV every eight hours for 10 to 14 days	
Vancomycin (Vancocin)	125 to 500 mg orally every six hours for 10 to 14 days	Oral only Nasogastric tube Retention enema...
...Drug	Price *	disadvantages
Metronidazole (Flagyl)	\$256 (36 to 40): 500 mg orally every six hours for 14 days \$678 (103 to 644):	Effective by IV administration Less expensive than vancomycin More...

...depending on prescription filling fee.

((dagger))--Vancomycin is not secreted into the bowel; therefore, IV administration is not effective.

Information from references 13, and 19 through 21.

Strength of Recommendations

Key clinical recommendation	Label	References
Test for Clostridium difficile toxin in patients	B	20

clostridium difficile.txt

with community-acquired or traveler's diarrhea  
who have had...

...162:2177-84.

(2.) McFarland LV, Mulligan ME, Kwok RY, Stamm WE. Nosocomial acquisition of *Clostridium difficile* infection. *N Engl J Med* 1989;320:204-10.

(3.) Bartlett JG, Chang TW, Gurwith...

...Dallal RM, Harbrecht BG, Boujoukas AJ, Sirio CA, Farkas LM, Lee KK, et al. Fulminant *Clostridium difficile*: an underappreciated and increasing cause of death and complications. *Ann Surg* 2002;235:363-72...

...Polavaram R, Kelly CP. Health care costs and mortality associated with nosocomial diarrhea due to *Clostridium difficile*. *Clin Infect Dis* 2002;34:346-53.

(6.) Bartlett JG. Clinical practice. Antibiotic-associated diarrhea

...

...334-9.

(7.) Clabots CR, Johnson S, Olson MM, Peterson LR, Gerdin DN. Acquisition of *Clostridium difficile* by hospitalized patients: evidence for colonized new admissions as a source of infection. *J Infect Dis* 1992;166:561-7.

(8.) Wilcox MH. Gastrointestinal disorders and the critically ill. *Clostridium difficile* infection and pseudomembranous colitis. *Best Pract Res Clin Gastroenterol* 2003;17:475-93.

(9.) Kelly CP, Pothoulakis C, LaMont JT. *Clostridium difficile* colitis. *N Engl J Med* 1994;330:257-62.

(10.) Kyne L, Warny M, Qamar A, Kelly CP. Association between antibody response to toxin A and protection against recurrent *Clostridium difficile* diarrhoea. *Lancet* 2001;357:189-93.

(11.) Kelly CP, LaMont JT. *Clostridium difficile* infection. *Annu Rev Med* 1998;49:375-90.

(12.) Wistrom J, Norrby SR, Myhre EB...

...study. *J Antimicrob Chemother* 2001;47:43-50.

(13.) Kyne L, Farrell RJ, Kelly CP. *Clostridium difficile*. *Gastroenterol Clin North Am* 2001;30:753-77, ix-x.

(14.) De Giolami PC, Hanff...

...H, Pratt J, et al. Multicenter evaluation of a new enzyme immunoassay for detection of *Clostridium difficile* enterotoxin A. *J Clin Microbiol* 1992;30:1085-8.

(15.) Altaie SS, Meyer P, Dryja D. Comparison of two commercially available enzyme immunoassays for detection of *Clostridium difficile* in stool specimens (published correction appears in *J Clin Microbiol* 1994;32:1623). *J Clin...*

...for toxins A and B, and cytotoxin B tissue culture assay for the diagnosis of *Clostridium difficile* diarrhea. *Am J Clin Pathol* 2003;119:45-9.

(17.) Wanahita A, Goldsmith EA, Marino BJ, Musher DM. *Clostridium difficile* infection in patients with unexplained leukocytosis. *Am J Med* 2003;115:543-6.

(18.) Viswanath...

...1998;74:216-9.

(19.) Florea NR, Kuti JL, Nightingale CH, Nicolau DP. Treatment of *Clostridium difficile*-associated disease (CDAD). *Conn Med* 2003;67:153-5.

(20.) Guerrant RL, Van Gilder T...

clostridium\_difficile.txt

...AM, Graninger W. Comparison of vancomycin, teicoplanin, metronidazole, and fusidic acid for the treatment of *Clostridium difficile*-associated diarrhea (published correction appears in Clin Infect Dis 1996;23:423). Clin Infect Dis...

...34:580-6.

(23.) Apisarnthanarak A, Razavi B, Mundy LM. Adjunctive intracolonic vancomycin for severe *Clostridium difficile* colitis: case series and review of the literature. Clin Infect Dis 2002;35:690-6...

...D, Coudron P, Markowitz SM. Hospital-wide restriction of clindamycin: effect on the incidence of *Clostridium difficile*-associated diarrhea and cost. Ann Intern Med 1998;128(12 pt 1): 989-95.

(26.) Surawicz CM. Probiotics, antibiotic-associated diarrhoea and *Clostridium difficile* diarrhoea in humans. Best Pract Res Clin Gastroenterol 2003;17:775-83.

MICHAEL S. SCHROEDER...

18/3,K/61 (Item 5 from file: 149) Links

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01811857 Supplier Number: 53408468 (USE FORMAT 7 OR 9 FOR FULL TEXT )  
Recognizing and Managing Clostridium Difficile-Associated Diarrhea.

Miller, Joanne M.; Walton, Jane C.; Tordecilla, Lydia L.  
MedSurg Nursing , 7 , 6 , 348(1)

Dec ,  
1998

Publication Format: Magazine/Journal; Refereed

ISSN: 1092-0811

Language: English

Record Type: Fulltext; Abstract Target Audience: Professional

Word Count: 5140 Line Count: 00464

Recognizing and Managing Clostridium Difficile-Associated Diarrhea.

Abstract: *Clostridium difficile* is responsible for over 75% of the diarrhea-associated enteric infections acquired during a hospital...  
Abstract:

Text:

*Clostridium difficile*-associated diarrhea poses a significant physical risk and cost to the recovery of hospitalized older...

...mucoid, malodorous stools a day. His temperature is 101 F rectally. A stool specimen for *Clostridium difficile* (*C. difficile*) toxin is obtained and is positive.

Diarrhea can pose a significant health threat...

...to 20% in older debilitated patients (Holmes & Notarangelo, 1987).

Risk factors

According to Bartlett (1986), *clostridium difficile* should be suspected as an enteric pathogen in any patient who develops a diarrhea or...

...Intestinal obstruction

## clostridium difficile.txt

\* Hirschsprung's disease

\* Necrotizing enterocolitis

\* History of cerebral toxoplasmosis or cytomegalovirus infection

Pathophysiology

Clostridium difficile is an opportunistic spore-forming gram-positive anaerobic bacillus. It produces at least two exotoxins, clostridium difficile, toxin A, primarily an enterotoxin, and toxin B, a cytotoxin (Gerding et al., 1995). These toxins bind to the colon receptors and are...

...Most of the antibiotic associated diarrhea and all cases of pseudomembranous colitis are caused by Toxin A (Walker et al., 1993). Recent studies indicate both toxins are active and contribute to cellular...responsible for the antibiotic-associated colitis, several laboratory tests have been developed that detect cytotoxin (toxin B) and the endotoxin (toxin A) (Bartlett, 1997; Gerding et al., 1995). Most infectious disease authorities indicate that the most common diagnostic tests for C. difficile are the cytotoxin assay which identifies toxin B, and the C. difficile organism culture. Generally, it is recommended that both the cytotoxin assay...

...Bartlett, 1992). Currently, new enzyme immunoassay tests (EIA) can provide more immediate results and detect toxin A (Rush Medical Laboratories, 1996). For further information on current laboratory tests for C. difficile refer...Monitor for re-occurrence.

### Management

\* Enforce strict contact isolation (begin before diagnosis).

\* Avoid antiperistaltic agents.

\* Administer

appropriate medications (metronidazole, cholestyramine, yeast preparations, oral vancomycin).

\* Maintain adequate fluid and electrolyte balance.

\* Prevent falls.

\* Maintain skin integrity.

\* Provide psychological support...

...colitis (Bartlett, 1997).

The nurse should carefully monitor the number, consistency, and amount of stools. Oral and intravenous intake, urinary output, and frequent weights must be done. Assessments for dehydration -- thirst...

...to stop the implicated agent, provide supportive measures, avoid the use of antiperistaltic agents, and administer specific antimicrobial agents when ordered. Supportive measures include essential rehydration with appropriate electrolytes and correction...

...resins, and medications that alter fecal flora. Metronidazole (250 mg to 500 mg tid) or oral vancomycin (125 mg to 500 mg qid) for 7 to 14 days are the usual...

...same course (LaMont, 1995). Vancomycin also has a bitter taste and is

clostridifficile.txt

nephrotoxic and ototoxic. Oral vancomycin is preferred over intravenous vancomycin because the IV route does not always reach effective ...it is effective in preventing recurrences of *C. difficile* when used as an adjunct to oral antibiotic therapy (Fekety et al., 1997). *S. boulardii* binds to toxin A and reduces or prevents the enterotoxin's effect on the colon but does not permanently colonize the gut (Fekety & Shah, 1993; LaMont, 1995). The use of active culture yogurt to help replace flora has been suggested by some clinicians; however, in studies with experimental animals, yogurt has not prevented antibiotic associated diarrhea (LaMont, 1995). Fecal enemas also have been suggested to...

...require a more complicated treatment regimen, which includes a 10 to 14 day course of oral vancomycin or metronidazole followed by a 3 week course of cholestyramine, cholestyramine plus lactobacillus, and...

...oatmeal, rice, potatoes, bananas, peaches, apricots, pears, strawberries) can help relieve diarrhea (Anastasi & Sun, 1996).

Oral rehydration must be quickly implemented "because by the time the first diarrheal stool is passed...assay be done to diagnose *C. difficile*.

Interventions focus on assessing and managing possible complications, administrating specific antibiotics, strict contact isolation, and teaching. Complications of *C. difficile* include fluid and electrolyte...

...uncontrollable diarrhea, and safety risks due to falls. Metronidazole is the first choice antibiotic, with oral vancomycin, cholestyramine, and specific yeast preparations as alternative or concurrent therapy. Maintaining contact isolation prevents...

...the HIV patient. American Journal of Nursing, 96(8), 35-42.

Bartlett, J. G. (1997). *Clostridium difficile* infection: Pathophysiology and diagnosis. Seminars in Gastrointestinal Disease, 8(1), 12-21.

Bartlett, J.G. (1992). Antibiotic-associated diarrhea. Clinical Infectious Diseases, 15, 573-581.

Bartlett, J.G. (1986). *Clostridium difficile*: Pseudomembranous colitis and antibiotic-associated diarrhea. In S. L. Gorbach (Ed.), *Infectious diarrhea* (pp. 157...).

...V., Surawicz, C.M., Greenberg, R.N., Elmer, G. W., & Mulligan, M.E. (1997). Recurrent *Clostridium difficile* diarrhea: Characteristics of and risk factors for patients enrolled in a prospective, randomized, double-blind...

...Infectious Diseases, 24, 324-333.

Fekety, R., & Shah, A.B. (1993). Diagnosis and treatment of *Clostridium difficile* colitis. Journal of the American Medical Association, 269, 71-75.

Gerding, D.N., Johnson, S., Peterson, L.R., Mulligan, M.E., & Silva, J. (1995). *Clostridium difficile*-associated diarrhea and colitis. Infection Control and Hospital Epidemiology, 16, 456-477.

Gurevich, I. (1994...).

...Decazes, J., Lagrange, R, Modal, J., & Molina J. (1997). Prevalence of and risk factors for *Clostridium difficile* colonization at admission to an infectious diseases ward. Clinical Infectious Diseases, 24, 920-924.

Jackson...

...G. (1996). *Gerontologic nursing*. St. Louis: Mosby.

Manian, F.A., Meyer, L., & Jenne, J. (1996). *Clostridium difficile* contamination of blood pressure cuffs: A call for a closer look at gloving practices in A., Larsson, A.J., Rotschafer, J.C., &

Guay, D.R.P. (1993). Clostridium difficile colonization in residents of long-term care facilities: Prevalence and risk factors. Journal of the...

18/3,K/62 (Item 1 from file: 444) Links

New England Journal of Med.

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00127360

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Human Botulism Immune Globulin for the Treatment of Infant Botulism (Original Articles)

Arnon, Stephen S.; Schechter, Robert; Maslanka, Susan E.; Jewell, Nicholas P.; Hatheway, Charles L.

The New England Journal of Medicine

Feb 2, 2006; 354 (5), pp 462-471

Line Count: 00433 Word Count: 05984

Text:

...medical record, examine the patient, obtain written informed consent for enrollment from the parents, and administer the contents of the vial. The study protocol was approved by the 62 institutional review... . . . . . laboratory workers and colleagues immunized for occupational safety with pentavalent botulinum toxoid (Food and Drug Administration FDA] Investigational New Drug application 0161) and given a single booster immunization before plasmapheresis.

Randomization.....BIG-IV that were performed after the trial was unblinded confirmed that all vials were administered as assigned.

Outcome Measures

The primary safety outcome for all study subjects, regardless of their... . . . . of 5 patients, 4 patients were admitted to nonparticipating hospitals, 3 patients were excluded for administrative reasons, and 1 patient was hospitalized for only 48 hours \*.\*.\*FIGURE OMITTED\*/\*Table 1.-Baseline..... . . . . . half-life of approximately 28 days in vivo and a large capacity to neutralize botulinum toxin. A single infusion will neutralize for at least six months all botulinum toxin that may be... . . . . . efficacy has never been evaluated in a controlled trial. In retrospective and observational studies, early administration of equine antitoxin to adult patients with foodborne and wound botulism was associated with improved...

Cited References

...Infect Dis 1984;150:407-12.

15. Outbreak of hepatitis C associated with intravenous immunoglobulin administration -- United States, October 1993-June 1994. MMWR Morb Mortal Wkly Rep 1994;43:505-9.....18. Arnon SS, Damus K, Thompson B, Midura TF, Chin J. Protective role of human milk against sudden death from infant botulism. J Pediatr 1982;100:568-73.

19. Schechter R, Peterson B, McGee J, Idowu O, Bradley J. Clostridium difficile colitis associated with infant botulism: near-fatal case analogous to Hirschsprung's enterocolitis. Clin Infect.... . . . P. A case of infant botulism due to neurotoxigenic Clostridium butyricum type E associated with Clostridium difficile colitis. Eur J Clin Microbiol Infect Dis 2002;21:736-8.

21. Johnson RO, Clay...

18/3,K/63 (Item 2 from file: 444) Links

New England Journal of Med.

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00113170

Weekly Clinicopathological Exercises: Case 25-1994: A 58-Year-Old Woman with Blood Diarrhea after Chemotherapy for Carcinoma of the Tongue (Case Records of the Massachusetts General Hospital)

Gorbach, Sherwood L.; Graeme-Cook, Fiona; Smith, R. Neal.

The New England Journal of Medicine

Jun 23, 1994; 330 (25), pp 1811-1817

Line Count: 00582 Word Count: 08042

Text:

...radiation therapy for a stage T4N2cM0 squamous-cell carcinoma of the tongue, followed by the administration of two cycles of fluorouracil, cisplatin, bleomycin, and methotrexate; the second cycle was begun 22.... dry heaves, and scanty blood in the stools. The symptoms did not improve after the administration of loperamide and diphenoxylate hydrochloride; the patient became unable to maintain an adequate oral intake and was admitted to the hospital.... Specimens of stool were obtained for further studies. Fluids and electrolytes were administered by vein; oxycodone-acetaminophen, diphenoxylate hydrochloride, and loperamide were given by mouth. During the next.... abdominal tenderness on deep compression, with diminished bowel sounds. Assay of a stool specimen for *Clostridium difficile* toxin was negative; microscopical examination of a stool specimen showed abundant red cells, without ova.... showed no change. A computed tomographic (CT) scan of the abdomen (Fig. 1), performed with oral contrast material, showed diffuse thickening of the large bowel that extended to the rectum; there.... During the day, the systolic blood pressure fell to 80 mm Hg. Pressor medications were administered by vein; the trachea was intubated, and assisted ventilation was begun. Ampicillin-sulbactam, gentamicin, and metronidazole were begun by vein; transfusions of fresh-frozen plasma were administered. An emergency laparotomy disclosed 1500 ml of straw-colored fluid in the peritoneal cavity; the... of assay are being used currently. The organism produces two potent toxins, A and B. Toxin A is an enterotoxin and appears to cause the colitis and diarrhea. Toxin B has potent cytotoxicity and is used to advantage in the tissue-culture assay for the.... were cytotoxin-negative, at least a third of the isolates produced cytotoxin in vitro. Recently, toxin A-negative, toxin B-positive strains of *C. difficile* have been isolated from infants (Ref. 17,18); such strains.... produce positive results on the cytotoxicity assay but would not cause disease; the genes for toxin A production were either missing or greatly reduced in those strains. To date there has been no isolation of a toxin A-positive, toxin B-negative strain, which could produce disease even if the cytotoxicity assay was negative. Nevertheless, it... Dr. Sherwood L. Gorbach's Diagnosis

*Clostridium difficile* pseudomembranous colitis associated with antineoplastic chemotherapy.... the State Laboratory Institute from January to August 1993.

Investigations have identified undercooked beef, raw milk, and cross-contaminated nondairy food products as sources of the infection. The patient under discussion...

Cited References

1. Anand A, Glatt AE. *Clostridium difficile* infection associated with antineoplastic chemotherapy: a review. *Clin Infect Dis* 1993;17:109-13.
- 2.... fluorouracil. *Gastroenterology* 1962;43:391-9.
7. Kamthan AG, Bruckner HW, Hirschman SZ, Agus SG. *Clostridium difficile* diarrhea induced by cancer chemotherapy. *Arch Intern Med* 1992;152:1715-7.
8. Gorbach SL.... Lyerly DM, Barroso LA, Wilkins TD. Identification of the latex test-reactive protein of *Clostridium difficile* as glutamate dehydrogenase. *J Clin Microbiol* 1991;29:2639-42.
11. DiPersio JR, Varga FJ, Conwell DL, Kraft JA, Kozak KJ, Willis DH. Development of a rapid enzyme immunoassay for *Clostridium difficile* toxin A and its use in the diagnosis of *C. difficile*-associated disease. *J Clin Microbiol* 1991.... PA, Eichelberger K, et al. Multicenter evaluation of a new enzyme immunoassay for

clostridium difficile.txt

detection of *Clostridium difficile* enterotoxin A. *J Clin Microbiol* 1992;30:1085-8.

13. Shanholtzer CJ, Willard KE, Holter JJ, Olson MM, Gerding DN, Peterson LR. Comparison of the VIDAS *Clostridium difficile* toxin A immunoassay with *C. difficile* culture and cytotoxin and latex tests. *J Clin Microbiol* 1992;30:1837-40.

14. Doern GV, Coughlin RT, Wu L. Laboratory diagnosis of *Clostridium difficile*-associated gastrointestinal disease: comparison of a monoclonal antibody enzyme immunoassay for toxins A and B with a monoclonal antibody enzyme immunoassay for toxin A only and two cytotoxicity assays. *J Clin Microbiol* 1992;30:2042-6.

15. Marler LM, Pettigrew Y, Skitt BL, Allen SD. Comparison of five cultural procedures for isolation of *Clostridium difficile* from stools. *J Clin Microbiol* 1992;30:514-6.

16. Lashner BA, Todorcek J, Sahm DF, Hanauer SB. *Clostridium difficile* culture-positive toxin-negative diarrhea. *Am J Gastroenterol* 1986;81:940-3.

17. Borriello SP, Wren BW, Hyde S, et al. Molecular, immunological, and biological characterization of a toxin A-negative, toxin B-positive strain of *Clostridium difficile*. *Infect Immun* 1992;60:4192-9.

18. Depitre C, Delmee M, Avesani V, et al. Serogroup F strains of *Clostridium difficile* produce toxin B but not toxin A. *J Med Microbiol* 1993;38:434-41.

19. Riley LW, Remis RS, Helgerson SD, et al. Holden J, Wu L, Ferraro MJ. Comparison of four methods in the diagnosis of *Clostridium difficile* disease. *Eur J Clin Microbiol Infect Dis* 1993;12:882-6.

28. Richardson SE, Karmali...

18/3,K/64 (Item 3 from file: 444) Links

New England Journal of Med.

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00112487

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Weekly Clinicopathological Exercises: Case 6-1994: A 31-Month-Old Girl with Fever, Diarrhea Distention, and Edema (Case Records of the Massachusetts General Hospital)

LaMont, J. Thomas; Rashid, Asif.  
The New England Journal of Medicine

Feb 10, 1994; 330 (6), pp 420-426

Line Count: 00531 Word Count: 07329

**Text:**

...breathing room air; the bicarbonate was 13 mmol per liter. Fluids, electrolytes, and ceftriaxone were administered by vein, and the patient was transferred to this hospital. En route the oxygen saturation.... The axillary temperature was 37.2 degreesC after the administration of acetaminophen; the systolic blood pressure was 85 mm Hg. The weight was 9.6...stool, and cerebrospinal fluid were obtained for culture. Fluids, electrolytes, ampicillin, ceftriaxone, and metronidazole were administered by vein. The patient continued to pass frequent loose, greenish stools that were positive for...The bacteria that cause intestinal infection include shigella, salmonella, and campylobacter species, *Clostridium difficile*, toxigenic or invasive strains of *Escherichia coli*, and *Yersinia* species. *Aeromonas* species and *Plesiomonas shigelloides*.... hemolysis, uremia, or neurologic deficits. Likewise, infection with *Yersinia enterocolitica*, which is transmitted by raw milk, contaminated foods, or exposure to sick pets, (Ref. 4) would not explain all the findings.... findings in this patient, several manifestations of the illness are against that diagnosis. Amoxicillin was administered for a pulmonary infection before and during the illness. This antibiotic resembles ampicillin, to which... infection (Ref. 11,12). The infection is transmitted from patient to patient by the fecal-oral route, although one hospital outbreak was attributed to the use of rectal thermometers (Ref. 13....exotoxins that cause damage to the colonic epithelium and diarrhea (Ref. 14). In animal models toxin A, the enterotoxin, is the primary mediator of enteritis, whereas toxin B, a cytotoxin, does not damage the bowel (Ref. 15). Preliminary in vitro studies with human colonic tissue, however, suggest that toxin B is more potent than toxin A in causing morphologic damage (Ref.

16... ...18). As shown in experimental studies in animals, exposure of the intestine to *C. difficile* toxin A causes a marked increase in epithelial permeability, with loss of albumin and other serum proteins... ...group with carbohydrate malabsorption and *C. difficile* infection. Serum and secretory antibodies to *C. difficile* toxin A occur in 50 to 60 percent of children more than two years old, and these...infections. One possible mechanism of antibody protection is that colonic secretions contain IgA directed against toxin A, which blocks its binding to its intestinal receptor (Ref. 25). Children with low serum levels of antitoxin to *C. difficile* toxin A may be more susceptible to relapsing *C. difficile* diarrhea (Ref. 26). In one study of six children with multiple relapses of *C. difficile* colitis and low serum antibodies to toxin A, improvement occurred after treatment with pooled gamma globulin, which contains a high titer of antibody to toxin A (Ref. 27). Thus, selective IgA or IgG-subclass deficiency might explain the recurrent infections and... ...Clinical Diagnosis

*Clostridium difficile* enterocolitisDr. J. Thomas LaMont's Diagnosis  
*Clostridium difficile* enterocolitis... ...diagnostic test was a positive enzyme-linked immunosorbent assay for the detection of *C. difficile* toxin A (enterotoxin) and toxin B (cytotoxin) in stool samples (Ref. 35,36... ...After the diagnosis of *C. difficile* colitis was made, vancomycin was administered orally and metronidazole and trimethoprim-sulfamethoxazole were administered intravenously. An assay for *C. difficile* toxin was negative after 13 days, but a sigmoidoscopic... ...loss were slow to resolve, and she did not recover until four weeks after the administration of therapy... ...status may be important (Ref. 24). In that study the serologic status for antibody to toxin A in patients in a hospital who were infected with *C. difficile* correlated with their clinical status. Asymptomatic carriers had a serum level of antibody to toxin A about four times higher than that in patients with diarrhea, suggesting that the status of this child was, antibiotics are often administered intravenously as well as orally. What is the benefit of the intravenous administration?

... ...Dr. LaMont: Intravenous therapy might be advantageous in a patient with ileus. Orally administered metronidazole or vancomycin does not reach the colon in the presence of ileus. One can try enemas of vancomycin or intravenously administered metronidazole, which enters the colonic lumen through the severely inflamed colonic wall. A reasonable approach... ...Anatomical Diagnosis  
*Pseudomembranous colitis* associated with *Clostridium difficile* toxin.

#### Cited References

- ...162:1107-11.
- 10. McFarland LV, Mulligan ME, Kwok RYY, Stamm WE. Nosocomial acquisition of *Clostridium difficile* infection. *N Engl J Med* 1989;320:204-10.
- 11. Fekety R, Kim K-H... ...D, Batts DH, Cudmore M, Silva J Jr. Epidemiology of antibiotic-associated colitis; isolation of *Clostridium difficile* from the hospital environment. *Am J Med* 1981;70:906-8.
- 12. Kaatz GW, Gitlin SD, Schaberg DR, et al. Acquisition of *Clostridium difficile* from the hospital environment. *Am J Epidemiol* 1988;127:1289-94.
- 13. Brooks SE, Veal RO, Kramer M, Dore L, Schupf N, Adachi M. Reduction in the incidence of *Clostridium difficile*-associated diarrhea in an acute care hospital and a skilled nursing facility following replacement of... ...*Infect Control Hosp Epidemiol* 1992;13:98-103.
- 14. Leyerly DM, Krivan HC, Wilkins TD. *Clostridium difficile*: its disease and toxins. *Clin Microbiol Rev* 1988;1:1-18.
- 15. Triadafilopoulos G, Pothoulakis C, O'Brien MJ, LaMont JT. Differential effects of *Clostridium difficile* toxins A and B on rabbit ileum. *Gastroenterology* 1987;93:273-9.
- 16. Riegler M, Feil W, Hamilton G, et al. *Clostridium difficile* toxin B is more potent than toxin A in damaging human colonic mucosa in vitro. *Gastroenterology* 1993;104:Suppl:A770. abstract.
- 17. Triadafilopoulos... ...RG, Laughon BE, Thomas DR, Greenough WB III, Bartlett JG. Protein-losing enteropathy associated with *Clostridium difficile* infection. *Lancet* 1989;1:1353-5.
- 18. Herman BE, Vargo J, Phillips WS, Sweeney WB ... ...1816-9.
- 20. Taylor NS, Thorne GM, Bartlett JG. Comparison of two toxins produced by

clostridium difficile.txt

Clostridium difficile. Infect Immun 1981;34:1036-43.

21. Sutphen JL, Grand RJ, Flores A, Chang TW, Bartlett JG. Chronic diarrhea associated with Clostridium difficile in children. Am J Dis Child 1983;137:275-8.

22. Perlmuter DH, Leichtner AM... . . . Laughon BE, Yolken R, et al. Serum antibody response to toxins A and B of Clostridium difficile. J Infect Dis 1983;148:93-100.

24. Mulligan ME, Miller SD, McFarland LV, Fung HC, Kwok RY. Elevated levels of serum immunoglobulins in asymptomatic carriers of Clostridium difficile. Clin Infect Dis 1993;16:Suppl 4:S239-S244.

25. Kelly CP, Pothoulakis C, Orellana J, LaMont JT. Human colonic aspirates containing immunoglobulin A antibody to Clostridium difficile toxin A inhibit toxin A-receptor binding. Gastroenterology 1992;102:35-40.

26. Gryboski JD, Pellerano R, Young N, Edberg S. Positive role of Clostridium difficile infection in diarrhea in infants and children. Am J Gastroenterol 1991;86:685-9.

27. Leung DY, Kelly CP, Boguniewicz M, Pothoulakis C, LaMont JT, Flores A. Treatment with intravenously administered gamma globulin of chronic relapsing colitis induced by Clostridium difficile toxin. J Pediatr 1991;118:633-7.

28. Wolfe MS. Giardiasis. JAMA 1975;233:1362... . . . 35. Lyerly DM, Phelps CJ, Wilkins TD. Monoclonal and specific polyclonal antibodies for immunoassay of Clostridium difficile toxin A. J Clin Microbiol 1985;21:12-4.

36. Lyerly DM, Phelps CJ, Toth J, Wilkins TD. Characterization of toxins A and B of Clostridium difficile with monoclonal antibodies. Infect Immun 1986;54:70-6.

37. Price AB, Davies DR. Pseudomembranous...

18/3,K/65 (Item 4 from file: 444) Links

New England Journal of Med.

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Medical Progress: Bacterial And Protozoal Gastroenteritis (Review Article)

Guerrant, Richard L.; Bobak, David A.

The New England Journal of Medicine

Aug 1 , 1991 ; 325 (5),pp 327-340

Line Count: 00741

Word Count: 10238

Text:

...highly selective approach to potentially costly diagnostic tests for this common problem is imperative. Although oral rehydration therapy is the cornerstone of treatment for all diarrheal illnesses, the severity of certain... . . . Ref. 13) and the rates may increase again in the elderly (as seen particularly with Clostridium difficile and salmonella infections) (Ref. 5,6,14). Although overall morbidity rates in young children in... . . . 18). Shigella, *G. lamblia*, *Entamoeba histolytica* and probably *cryptosporidium* are also transmitted by direct fecal-oral spread among some homosexual men (Ref. 19,20). \*Table 1. Organisms Causing Outbreaks of Diarrhea... is spent each year in the United States (Ref. 58). The popularity of drinking unpasteurized milk and eating raw or undercooked fish, shellfish, and meat brings increasing risks of certain bacterial... . . . liver disease who eat raw oysters and unexplained chronic diarrhea after the consumption of raw milk or untreated well water (Ref. 58,65-68). Waterborne outbreaks, usually caused by *G. lamblia*... .

...Poisoning Syndromes \*. \*\*TABLE OMITTED\*\* \*Figure 1.-Approach to the Diagnosis and Management of Infectious Diarrhea. Oral rehydration solution can be prepared by adding 3.5 g of sodium chloride (or 3...water and electrolytes (Ref. 145-147). Active immunity, as well as passive protection by breast-milk antibody, lactoferrin, lysozyme, antibody, and other factors help prevent many enteric infections (Ref. 148). Finally . . . I and possibly II), (Ref. 155-159) by the activation of guanylate cyclase (heat-stable toxin a, including *STh* or *STp*), (Ref. 160-162) or through a pathway independent of guanylate cyclase or adenylate cyclase (heat-stable toxin b) (Ref. 163,164). The roles of cholera-like heat-labile toxins or heat-stable toxins... . . . pathogenesis of diarrhea with these organisms remain unclear (Ref.

165-168). In addition, *Clostridium difficile* toxin A, *Clostridium perfringens* type A, *Staph. aureus*, *Bacillus cereus*, *B. fragilis*, and two recently described *Esch.*...parasites, and blood cultures are unrevealing (Ref. 209). For the majority of noninflammatory illnesses, simple oral glucose-electrolyte rehydration is sufficient, and may be lifesaving. In patients with a suspected inflammatory.... .which remains largely intact even in the severest of diarrheal illnesses, with a simply prepared oral rehydration solution (Fig. 1). Not only is this solution lifesaving in severe diarrhea in which.... .intensive care as well. Furthermore, the output of stool can be reduced with food-based oral rehydration therapy (Ref. 214). With the additional sodium-coupled absorption of neutral amino acids and...the small bowel, analogous to short-chain fatty acids in the colon), (Ref. 215-217) oral rehydration therapy can also be used to speed recovery from bowel injury. The composition of cereal-based oral rehydration solution is like that of standard oral rehydration solution (3.5 g of sodium chloride, 2.5 g of sodium bicarbonate, and.... .1.1 liters of water and brought to a boil (Ref. 214). Not only can oral rehydration therapy (especially with cereal and continued feeding) reverse the loss of fluid, but it.... .major cause of death in children with diarrhea in developing areas (Ref. 218). Furthermore, simple oral rehydration therapy can be started early in the home and can prevent most complications of.... .In addition to oral rehydration therapy, one should consider specific antimicrobial therapy for symptomatic patients with inflammatory or parasitic...

#### Cited References

...campuses: a national survey. *Am J Public Health* 1985; 75:659-60.

14. Bartlett JG. *Clostridium difficile*: clinical considerations. *Rev Infect Dis* 1990; 12:Suppl 2:S243-S251.

15. Guerrant RL, Lohr.... .98:780-5.

33. McFarland LV, Mulligan ME, Kwok RYY, Stamm WE. Nosocomial acquisition of *Clostridium difficile* infection. *N Engl J Med* 1989; 320:204-10.

34. Aronsson B, Mollby R, Nord C-E. Antimicrobial agents and *Clostridium difficile* in acute enteric disease: epidemiological data from Sweden, 1980-1982. *J Infect Dis* 1985; 151.... .F, Privitera G, Ortisi G, et al Third generation cephalosporins as a risk factor for *Clostridium difficile*-associated disease: a four-year survey in a general hospital. *J Antimicrob Chemother* 1989; 23.... .143:865.

37. Cudmore MA, Silva J Jr, Fekety R, Liepman MK, Kim K-H. *Clostridium difficile* colitis associated with cancer chemotherapy. *Arch Intern Med* 1982; 142:333-5.

38. Dearing WH...Soc 1984; 32:513-9.

43. Bender BS, Bennett R, Laughon BE, et al Is *Clostridium difficile* endemic in chronic-care facilities? *Lancet* 1986; 2:11-3.

44. Treolar AJ, Kalra L. Mortality and *Clostridium difficile* diarrhoea in the elderly. *Lancet* 1987; 2:1279.

45. Rybolt AH, Bennett RG, Laughon BE, Thomas DR, Greenough WB III, Bartlett JG. Protein-losing enteropathy associated with *Clostridium difficile* infection. *Lancet* 1989; 1:1353-5.

46. Roberts SH, James O, Jarvis EH. Bacterial overgrowth.... .KE, et al An outbreak of a newly recognized chronic diarrhea syndrome associated with raw milk consumption. *JAMA* 1986; 256:484-90

68. Parsonnet J, Trock SC, Bopp CA, et al...*Gastroenterology* 1956; 31:708-15.

148. Welsh JK, May JT. Anti-infective properties of breast milk. *J Pediatr* 1979; 94:1-9.

149. Bohnhoff M, Miller CP, Martin WR. Resistance of.... .MK, Hargrett-Bean NT, et al Massive outbreak of antimicrobial-resistant salmonellosis traced to pasteurized milk. *JAMA* 1987; 258:3269-74.

153. Pavia ...161:255-60.

154. Gorbach SL, Chang T-W, Goldin B. Successful treatment of relapsing *Clostridium difficile* colitis with *Lactobacillus GG*. *Lancet* 1987; 2:1519.

155. Tvede M, Rask-Madsen J. Bacteriotherapy for chronic relapsing *Clostridium difficile* diarrhoea in six patients. *Lancet* 1989; 1:1156-60.

156. Kimberg DV, Field M, Johnson.... .ST 1a). *Infect Immun* 1989; 57:649-52.

169. Leyerly DM, Krivan HC, Wilkins TD. *Clostridium difficile*: its disease and toxins. *Clin Microbiol Rev* 1988; 1:1-18.

170. Kapral FA. *Staphylococcus*... .1450-5.

clostridium difficile.txt

174. Lima AAM, Lyerly DM, Wilkins TD, Innes DJ, Guerrant RL. Effects of *Clostridium difficile* toxins A and B in rabbit small and large intestine in vivo and on cultured...1978; 2:300-1.

211. Mahalanabis D, Merson M. Development of an improved formulation of oral rehydration salts (ORS) with antidiarrhoeal and nutritional properties: a 'Super ORS.' In: Holmgren J, Lindberg... Sweden: Studentlitteratur, 1986:240-56.

212. World Health Organization. Diarrhoeal Diseases Control Programme: impact of oral rehydration therapy on hospital admission and case-fatality rates for diarrhoeal disease: results from 11... Record. Vol. 63. No. 8. February 9, 1988:49-52.

213. Avery ME, Snyder JD. Oral therapy for acute diarrhea: the underused simple solution. *N Engl J Med* 1990; 323:891-4.

214. Molla AM, Molla A, Nath S, Khatun M. Food-based oral rehydration salt solution for acute childhood diarrhoea. *Lancet* 1989; 2:429-31.

215. Lima AAM, Khin-Maung U, Guerrant RL. Physiologic basis for oral rehydration therapy of enterotoxigenic *E. coli* and rotaviral diarrhea. In: Guerrant RL, de Souza MA... 114:195-9.

222. Johnson S, Homann S, Quick J, et al. Treatment of asymptomatic *Clostridium difficile* (CD) carriers with vancomycin (V), metronidazole (M), and placebo (P).

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>>>W: One or more prefixes are unsupported or undefined in one or more files.

65 S18

39917627 PY>=2003

S19 22 S S18 NOT PY>=2003

? rd

>>>W: Duplicate detection is not supported for File 393.

Duplicate detection is not supported for File 391.

Records from unsupported files will be retained in the RD set.

S20 20 RD (UNIQUE ITEMS)

? t s20/3,k/1-20

>>>W: KWIC option is not available in file(s): 399

20/3,K/1 (Item 1 from file: 5) Links

Fulltext available through: STIC Full Text Retrieval Options

Biosis Previews(R)

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14655522 Biosis No.: 199800449769

*Clostridium difficile* infection. Current problems

Author: Fulgione Vito (Reprint)

Author Address: Via Fara Sabina 1, 00199 Roma, Italy\*\*Italy

Journal: *Recenti Progressi in Medicina* 89 ( 7-8 ): p 385-394 July-Aug., 1998 1998

Medium: print

ISSN: 0034-1193

Document Type: Article; Literature Review

Record Type: Abstract

Language: Italian

*Clostridium difficile* infection. Current problems

Abstract: *Clostridium difficile* is a gram-positive anaerobe that forms subterminal spores. It is now one of major... the natural microflora has been modified by antibiotic therapy. Toxigenic strains of *C. difficile* produce toxin A (enterotoxin) or toxin B (citoxin) or both which cause the cytotoxic effect "rounding". *C. difficile* can spread from patient... diarrhea (antibiotic associated diarrhea) to fatal pseudomembranous colitis (PMC). The current therapy is based on oral

clostridifficile.txt

administration of metronidazole or vancomycin. In patients non responders or that continue to relapse can be used other forms of therapy: antibiotic (teicoplanine, bacitracine, rifamixine); anion exchange resin (colestipol, colestiramine); probiotic therapy (*S. boulardii*, *Lactobacilli* and fecal enemas). New and improved studies will lead to new ...

**DESCRIPTORS:**

Organisms: ...probiotic; ... . . . . .Clostridium-difficile (Endospore-forming

Gram-Positives... . . . . .probiotic

Organisms: Parts Etc:

Diseases: ...Clostridium difficile infection

Mesh Terms:

20/3,K/2 (Item 1 from file: 34) Links

Fulltext available through: STIC Full Text Retrieval Options

SciSearch(R) Cited Ref Sci

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07388912 Genuine Article#: 159NW No. References: 31

Bovine immunoglobulin concentrate Clostridium difficile retains C-difficile toxin neutralising activity after passage through the human stomach and small intestine

Author: Warny M; Fatimi A; Bostwick EF; Laine DC; Lebel F; LaMont JT; Pothoulakis C ; Kelly CP (REPRINT)

Corporate Source: HARVARD UNIV,SCH MED, DIV GASTROENTEROL, BETH ISRAEL DEACONESS MED CTR, DANA 601, 330 BR/BOSTON//MA/02115 (REPRINT); HARVARD UNIV,SCH MED, DIV GASTROENTEROL, BETH ISRAEL DEACONESS MED CTR/BOSTON//MA/02115; GALAGEN INC,/ARDEN HILLS//MN/

Journal: GUT , 1999 , v 44 , N2 ( FEB ) , P 212-217

ISSN: 0017-5749 Publication date: 19990200

Publisher: BRITISH MED JOURNAL PUBL GROUP , BRITISH MED ASSOC HOUSE, TAVISTOCK SQUARE, LONDON WC1H 9JR, ENGLAND

Language: English Document Type: ARTICLE ( ABSTRACT AVAILABLE )

Bovine immunoglobulin concentrate Clostridium difficile retains C-difficile toxin neutralising activity after passage through the human stomach and small intestine

Abstract: Background-Bovine immunoglobulin concentrate (BIC)-Clostridium difficile is prepared from the colostrum of cows immunised against C difficile toxins and contains high....ileum transit times (68% versus 36%, p<0.05). Specific bovine IgE against C difficile toxin A was detected in ileal fluid following oral BIG. Toxin neutralising activity was also present and correlated closely with bovine IgG levels (r.... C difficile resists digestion in the human upper gastrointestinal tract and specific anti-C difficile toxin A binding and neutralising activity was retained. Passive oral immunotherapy with anti-C difficile BIC may be a useful non-antibiotic approach to the...

Identifiers-- ...ESCHERICHIA-COLI; MILK IMMUNOGLOBULINS; PASSIVE-IMMUNIZATION; ANTIBODY-RESPONSE; RHO-PROTEINS; HAMSTERS; DIARRHEA; COLOSTRUM; GASTROENTERITIS; PROTECTION

20/3,K/3 (Item 2 from file: 34) Links

Fulltext available through: STIC Full Text Retrieval Options

SciSearch(R) Cited Ref Sci

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04323483 Genuine Article#: RV536 No. References: 37

LONG-TERM INGESTION OF LACTOSUCROSE INCREASES BIFIDOBACTERIUM SP IN HUMAN FECAL FLORA

Author: OHKUSA T; OZAKI Y; SATO C; MIKUNI K; IKEDA H

Corporate Source: TOKYO MED & DENT UNIV,SCH MED,DEPT INTERNAL MED1,BUNKYO KU,YUSHIMA 1-5/TOKYO 113//JAPAN/

Journal: DIGESTION , 1995 , v 56 , N5 ( SEP-OCT ) , P 415-420

ISSN: 0012-2823

Language: ENGLISH Document Type: ARTICLE ( Abstract Available )

*clostridifficile.txt*

Abstract: ...8 weeks. Fecal microflora, bacterial metabolites, pH, and moisture were analyzed before and after the administration of lactosucrose. The results showed that the number and percentage of *Bifidobacterium* sp. in relation to the total bacteria significantly increased during the period of lactosucrose administration. Although fecal putrefactive products, fatty acids, pH, moisture content, and stool volume did not show... number of *Bifidobacterium* sp. Fecal ammonia significantly decreased after 4 and 8 weeks of lactosucrose administration, and 1 week after the end of lactosucrose administration, compared with results after a 1-week administration of lactosucrose. When the administration was stopped, the percentage of *Bifidobacterium* sp. in relation to the total count gradually decreased to the same level as before the administration of lactosucrose. These results suggest that under physiological conditions, lactosucrose acts on the intestinal microflora...

Identifiers-- ...FERMENTED MILK; COLONIZATION RESISTANCE; BACTERIA

Research Fronts: 93-2333 003 (FECAL FLORA; TRANSGALACTOSYLATED OLIGOSACCHARIDES; CECAL MUCOSA)

93-1901 001 (CLOSTRIDIUM-DIFFICILE TOXIN-A; ACUTE DIARRHEA; MCCOY CELL ASSAY)

93-4511 001 (INTESTINAL MICROFLORA; BACTERIAL FECAL FLORA; PIG MODEL...)

Cited References:

20/3,K/4 (Item 3 from file: 34) Links

Fulltext available through: STIC Full Text Retrieval Options

SciSearch(R) Cited Ref Sci

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03358784 Genuine Article#: NZ047 No. References: 133

UPDATE ON CLOSTRIDIUM DIFFICILE-INDUCED COLITIS .1.

Author: REINKE CM; MESSICK CR

Corporate Source: AUBURN UNIV,SCH PHARM,DEPT CLIN PHARM PRACTICE,308 PHARM BLDG/AUBURN//AL/36849; E ALABAMA MED CTR/OPELIKA//AL/00000; UNIV N CAROLINA HOSP/CHAPEL HILL//NC/00000

Journal: AMERICAN JOURNAL OF HOSPITAL PHARMACY , 1994 , V 51 , N14 ( JUL 15 ) , P 1771-1781

ISSN: 0002-9289

Language: ENGLISH Document Type: REVIEW ( Abstract Available )

UPDATE ON CLOSTRIDIUM DIFFICILE-INDUCED COLITIS .1.

Abstract: Recent findings on the epidemiology, pathogenesis, clinical manifestations, diagnosis, and treatment of *Clostridium difficile*-induced colitis (CDIC) are discussed.

CDIC is a gastrointestinal disorder that results from colonization by and overgrowth of *C. difficile*. Among patients in the community who are treated with an oral antimicrobial, only 1 to 3 individuals per 100,000 develop CDIC, compared with as many.... a period of watchful waiting may be advisable in mild cases. When treatment is necessary, oral metronidazole is the agent of choice in all but the most severe cases. Whether oral metronidazole is therapeutically equivalent to oral vancomycin in severe CDIC is controversial. Regardless of the antimicrobial used, some patients suffer a ...

Identifiers--

Research Fronts: 92-1932 003 (CLOSTRIDIUM-DIFFICILE TOXIN-A; ANTIBIOTIC-ASSOCIATED FULMINANT PSEUDOMEMBRANOUS COLITIS; ACUTE INFECTIVE DIARRHEA)

92-0825 001 (INVITRO ACTIVITY OF TEMAFLOXACIN; METHICILLIN-RESISTANT

STAPHYLOCOCCUS-AUREUS; QUINOLONE ANTIMICROBIAL AGENTS)

92-4482 001 (SECRETORY ANTIBODIES; MOTHERS MILK; FECAL LACTOFERRIN; BREAST-FED INFANTS LIMIT GASTROENTERITIS)

Cited References:

20/3,K/5 (Item 4 from file: 34) Links

Fulltext available through: STIC Full Text Retrieval Options

SciSearch(R) Cited Ref Sci

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02153296 Genuine Article#: KF249 No. References: 39

ADMINISTRATION OF DIFFERENT LACTOBACILLUS STRAINS IN FERMENTED OATMEAL SOUP - INVIVO COLONIZATION OF HUMAN INTESTINAL-MUCOSA AND EFFECT ON THE INDIGENOUS FLORA

Author: JOHANSSON ML; MOLIN G; JEPSSON B; NOBAEK S; AHRNE S; BENGMARK S

Corporate Source: UNIV LUND,DEPT FOOD TECHNOL,FOOD HYG LAB,POB 124/S-22100

LUND//SWEDEN//; UNIV LUND,DEPT FOOD TECHNOL,FOOD HYG LAB,POB 124/S-22100

LUND//SWEDEN//; UNIV LUND,DEPT SURG/S-22185 LUND//SWEDEN//

Journal: APPLIED AND ENVIRONMENTAL MICROBIOLOGY , 1993 , V 59 , N1 ( JAN ) , P 15-20

ISSN: 0099-2240

Language: ENGLISH Document Type: ARTICLE ( Abstract Available )

ADMINISTRATION OF DIFFERENT LACTOBACILLUS STRAINS IN FERMENTED OATMEAL SOUP - INVIVO COLONIZATION OF HUMAN INTESTINAL-MUCOSA AND...

Abstract: ...on human intestinal mucosa of healthy volunteers was studied together with the effect of Lactobacillus administration on different groups of indigenous bacteria. A total of 19 test strains were administered in fermented oatmeal soup containing  $5 \times 10^6$  CFU of each strain per ml... ...days. Biopsies were taken from both the upper jejunum and the rectum 1 day before administration was started and 1 and 11 days after administration was terminated. The administration significantly increased the Lactobacillus counts on the jejunum mucosa, and high levels remained 11 days after administration was terminated. The levels of streptococci increased by 10- to 100-fold in two persons... ...jejunum decreased by 10- to 100-fold in three of the volunteers 1 day after administration was terminated. In recta, the anaerobic bacterium counts and the gram-negative anaerobic bacterium counts decreased significantly by the end of administration. Furthermore, a decrease in the number of members of the Enterobacteriaceae by 1,000-fold... ...plasmid profiles of strains and by restriction endonuclease analysis of chromosomal DNAs. The following five administered Lactobacillus strains were reisolated from the mucosa 1 day after the end of administration: Lactobacillus plantarum 299 and 299v, Lactobacillus casei subsp. rhamnosus 271, Lactobacillus reuteri 108, and Lactobacillus agilis 294. All of these strains were also found 11 days after administration was terminated, although *L. plantarum* 299 and 299v were dominant.

Identifiers-- ...DAIRY-PRODUCTS; MICROFLORA; ACIDOPHILUS; GUT; INFECTIONS; YOGURT; IMPACT

Research Fronts: ...TRANSLOCATION; GLUTAMINE-METABOLISM IN SEPTIC RATS; INCREASED GUT PERMEABILITY FOLLOWING BURN TRAUMA)

91-1233 002 ( CLOSTRIDIUM-DIFFICILE TOXIN-A; ANTIBIOTIC-ASSOCIATED DIARRHEA; NORMAL INTESTINAL MICROFLORA)

91-2849 001 (ANAEROBIC GLYCEROL DEGRADATION; BIOCONTROL STRAINS OF...

Cited References:

20/3,K/6 (Item 5 from file: 34) Links

SciSearch(R) Cited Ref Sci

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01123323 Genuine Article#: FY715 No. References: 230

MEDICAL PROGRESS - BACTERIAL AND PROTOZOAL GASTROENTERITIS

Author: GUERRANT RL; BOBAK DA

Corporate Source: UNIV VIRGINIA,SCH MED,DEPT MED,DIV GEOG MED/CHARLOTTESVILLE//VA/22908; UNIV VIRGINIA,SCH MED,DEPT MICROBIOL/CHARLOTTESVILLE//VA/22908

Journal: NEW ENGLAND JOURNAL OF MEDICINE , 1991 , V 325 , N5 , P 327-340

Language: ENGLISH Document Type: REVIEW

Identifiers-- ...ACQUIRED-IMMUNODEFICIENCY-SYNDROME; STABLE ENTERO-TOXIN; DAY-CARE-CENTERS; ENTEROHEMORRHAGIC ESCHERICHIA-COLI; CAMPYLOBACTER-JEJUNI INFECTIONS; CLOSTRIDIUM-DIFFICILE INFECTION; ISOSPORA-BELLI INFECTION; TISSUE-CULTURE CELLS; AUREUS DELTA-TOXIN; CHRONIC DIARRHEA

Research Fronts: ...COWS

89-0600 004 (PNEUMOCYSTIS-CARINII PNEUMONIA; ACQUIRED IMMUNODEFICIENCY SYNDROME; AIDS PATIENTS)

*clostridiumdifficile.txt*

89-0757 004 (CLOSTRIDIUM-DIFFICILE TOXIN-A; PSEUDOMEMBRANOUS COLITIS; ANTIBIOTIC-ASSOCIATED DIARRHEA)  
89-0560 002 (ACUTE DIARRHEA IN PRIMARY CARE UNITS; PRESCRIPTION... . . . 89-0268 001 (FOOD HYPERSENSITIVITY; PATHOGENESIS OF ATOPIC-DERMATITIS; LEGUME BOTANICAL FAMILY IN CHILDREN; COW MILK ALLERGY; LATEX CONTACT URTICARIA; PATCH TEST)  
89-0546 001 (PULSE OXIMETRY; NOSOCOMIAL PNEUMONIA; PROTECTED BRUSH... . . . DIARRHEA)  
89-3656 001 (ENTEROPATHOGENIC ESCHERICHIA-COLI; PERSISTENT DIARRHEA; LOCALIZED ADHERENCE FACTOR)  
89-4088 001 (ORAL CHOLERA VACCINES; KILLED WHOLE CELLS; HUMAN ENTERO-TOXIGENIC ESCHERICHIA-COLI; ISOLATED OUTER-MEMBRANE ANTIGENS)  
89...

20/3,K/7 (Item 6 from file: 34) Links

SciSearch(R) Cited Ref Sci

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01085922 Genuine Article#: FV062 No. References: 31

A HUMAN LACTOBACILLUS STRAIN (LACTOBACILLUS-CASEI SP STRAIN GG) PROMOTES RECOVERY FROM ACUTE DIARRHEA IN CHILDREN

Author: ISOLAURI E; JUNTUNEN M; RAUTANEN T; SILLANAUKEE P; KOIVULA T  
Corporate Source: UNIV TAMPERE,DEPT CLIN SCI/SF-33520 TAMPERE//FINLAND//; TAMPERE UNIV HOSP,DEPT PEDIAT/TAMPERE//FINLAND//; TAMPERE UNIV HOSP,DEPT CLIN CHEM/TAMPERE//FINLAND/

Journal: PEDIATRICS , 1991 , v 88 , n1 , p 90-97

Language: ENGLISH Document Type: ARTICLE (Abstract Available)

Abstract: ...rotavirus), 71 well-nourished children between 4 and 45 months of age were studied. After oral rehydration, the patients randomly received either Lactobacillus GG-fermented milk product, 125 g (10(10-11) colony-forming units) twice daily (group 1); Lactobacillus GG... . . . 10(10-11) colony-forming units) twice daily (group 2); or a placebo, a pasteurized yogurt (group 3) 125 g twice daily; each diet was given for 5 days, in addition... . . . recovery from diarrhea. It is further suggested that Lactobacillus GG in the form of fermented milk or freeze-dried powder is effective in shortening the course of acute diarrhea.

Identifiers-- . . . ORAL REHYDRATION; NUTRITIONAL MANAGEMENT; INTESTINAL MICROFLORA; FERMENTED MILK; PERMEABILITY; ACIDOPHILUS; FORMULA

Research Fronts: 89-0740 002 (DIETARY FIBER; LACTULOSE HYDROGEN BREATH TEST; ORAL REHYDRATION THERAPY; OROCECAL TRANSIT-TIME; BAKING HULLESS BARLEY; ENZYME SUPPLEMENTATION)

89-0757 001 (CLOSTRIDIUM- DIFFICILE TOXIN-A; PSEUDOMEMBRANOUS COLITIS; ANTIBIOTIC-ASSOCIATED DIARRHEA)

Cited References:

20/3,K/8 (Item 7 from file: 34) Links

SciSearch(R) Cited Ref Sci

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01010768 Genuine Article#: FN775 No. References: 27

PASSIVE-IMMUNIZATION OF HAMSTERS AGAINST DISEASE CAUSED BY CLOSTRIDIUM-DIFFICILE BY USE OF BOVINE IMMUNOGLOBULIN-G CONCENTRATE

Author: LYERLY DM; BOSTWICK EF; BINION SB; WILKINS TD

Corporate Source: VIRGINIA POLYTECH INST & STATE UNIV,DEPT ANAEROB  
MICROBIOL/BLACKSBURG//VA/24061; PROCOR TECHNOL INC/MINNEAPOLIS//MN/55440

Journal: INFECTION AND IMMUNITY , 1991 , v 59 , n6 , p 2215-2218

Language: ENGLISH Document Type: NOTE (Abstract Available)

PASSIVE-IMMUNIZATION OF HAMSTERS AGAINST DISEASE CAUSED BY CLOSTRIDIUM-DIFFICILE BY USE OF BOVINE IMMUNOGLOBULIN-G CONCENTRATE

Abstract: Gestating Holstein cows were vaccinated with Clostridium difficile toxoid prepared from the culture filtrate of a strain that produces high levels of toxins... . . . hyperimmune bovine IgG concentrate were protected against C. difficile disease. These results suggest that orally administered hyperimmune bovine IgG

**clostrdifficile.txt**

specific for *C. difficile* culture filtrate may be useful in prophylaxis against...  
Identifiers-- ...ANTIBIOTIC-ASSOCIATED CECITIS; SACCHAROMYCES-BOULARDII; TOXIN- A;  
ROTAVIRUS GASTROENTERITIS; MILK IMMUNOGLOBULINS; INDUCED MORTALITY;  
ESCHERICHIA-COLI; CHOLERA-TOXIN; PREVENTION; SUPPRESSION  
Research Fronts: 89-0757 001 (CLOSTRIDIUM-DIFFICILE TOXIN-A; PSEUDOMEMBRANOUS  
COLITIS; ANTIBIOTIC-ASSOCIATED DIARRHEA)

Cited References:

20/3,K/9 (Item 1 from file: 71) Links

Fulltext available through: STIC Full Text Retrieval Options

ELSEVIER BIOBASE

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00236678 95024955

Immunoglobulin and non-immunoglobulin components of human milk inhibit *Clostridium difficile* toxin A-receptor binding

Rolfe R.D.; Song W.

Address: R.D. Rolfe, Department Microbiology/Immunology, School of Medicine, Texas Tech Univ. Hlth Sci. Center, Lubbock, TX 79430, United States

Journal : Journal of Medical Microbiology, 42/1 (10-19), 1995, United Kingdom

PUBLICATION DATE: 19950000

CODEN: JMMIA

ISSN: 0022-2615

Document Type: Article

Languages: English Summary Languages: English

Immunoglobulin and non-immunoglobulin components of human milk inhibit *Clostridium difficile* toxin A-receptor binding

*Clostridium difficile* is isolated from the intestinal tracts of > 50% of healthy infants. The mechanism by which... . . .toxigenic *C. difficile* is generally asymptomatic is unknown but may reflect the presence in human milk of neutralising activity against *C. difficile* toxin A. On this basis, the ability of human milk to inhibit the binding of toxin A to a purified hamster brush border membrane receptor was determined. Ten milk samples from healthy volunteers in various stages of lactation inhibited the binding of toxin A to the receptor by an average of 90%. Heating and dialysis did not significantly alter the inhibitory activity of any of the milk samples. Human milk protected adult hamsters against a lethal challenge with toxin A but had no effect on the cytotoxic activity of the toxin. SDS-PAGE and ligand blot analyses showed that there were at least four distinct factors in human milk that specifically bound toxin A. Thiophilic adsorption chromatography was used to-separate immunoglobulin from non-immunoglobulin components of human milk. IgA was the only immunoglobulin detected in human milk and > >90% of this immunoglobulin was recovered after purification by thiophilic adsorption. Both the unbound non-immunoglobulin and bound immunoglobulin fractions of human milk inhibited the binding of-toxin A to the purified receptor. These results suggest that human milk may be important in protecting infants against *C. difficile*-associated intestinal disease.

CLASSIFICATION CODE AND DESCRIPTION:

Modlecular Sequence Databank Number: ...Mucosal and Oral Immunity

20/3,K/10 (Item 1 from file: 73) Links

Fulltext available through: STIC Full Text Retrieval Options

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0079197124 EMBASE No: 2002360919

*Clostridium difficile*

Stoddart B.; Wilcox M.H.

*clostridium difficile.txt*

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Corresp. Author/Affil: wilcox M.H.: Department of Microbiology, General Infirmary, University of Leeds, Leeds LS1 3EX, United Kingdom

Corresp. Author Email: markwi@pathology.leeds.ac.uk

Current Opinion in Infectious Diseases ( Curr. Opin. Infect. Dis. ) ( United Kingdom ) October 1, 2002 , 15/5 (513-518)

CODEN: COIDE ISSN: 0951-7375

Document Type: Journal ; Review Record Type: Abstract

Language: English Summary language: English

Number of References: 51

*Clostridium difficile*

*Clostridium difficile* is the most commonly identified infective cause of antibiotic associated diarrhoea. Broad spectrum antibiotics, are... . . . . . based cytotoxin assays have been compared to rapid immunoassays, which are less effective, especially since toxin A negative, toxin B positive strains have been shown to be truly virulent. Details of colonization and adherence mechanisms... . . . . . strategies. These include a toxin binding polymer and ongoing biotherapy research. An antibody rise to toxin A during an episode of *C. difficile* diarrhoea protects against recurrence, and trials are in progress ...

Drug Descriptors:

\* antibiotic agent--drug therapy--dt; cephalosporin; clarithromycin; clindamycin; *Clostridium difficile* toxin A; *Clostridium difficile* toxin B; *Clostridium* toxin; cytotoxin; metronidazole--drug administration--ad; metronidazole--drug therapy--dt; metronidazole--intravenous drug administration--iv; metronidazole--oral drug administration--po; penicillin derivative; polymer--clinical trial --ct; polymer--drug therapy--dt; polymer--oral drug administration--po; polymer--pharmacology--pd; probiotic agent--clinical trial--ct; probiotic agent--drug therapy--dt; probiotic agent--oral drug administration--po; quinoline derived antiinfective agent; toxoid--clinical trial--ct; toxoid --drug therapy--dt; unclassified drug; vancomycin--drug administration--ad; vancomycin--drug therapy--dt; vancomycin --intragastric drug administration--ig; vancomycin--oral drug administration--po

Medical Descriptors:

\* *Clostridium difficile*; \*diarrhea--diagnosis--di; \*diarrhea --drug resistance--dr; \*diarrhea--drug therapy--dt; \*diarrhea--epidemiology --ep; \*diarrhea...

20/3,K/11 (Item 2 from file: 73) Links

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0078913473 EMBASE No: 2002077151

5-Fluorouracil-induced colitis - A review based upon consideration of 6 cases

5-Fluorouracil-assoziierte kolitis - Eine ubersicht unter berucksichtigung einer eigenen sammlung von 6 fallen

Madisch A.; Wiedbrauck F.; Marquard F.; Stolte M.; Hotz J.

Medizinische Klinik and Poliklinik I, Univ. Klin. Carl Gustav Carus, Technische Universitat, Fetscherstrasse 74, 01307 Dresden, Germany

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Corresp. Author Email: madisch@mk1.med.tu-dresden.de

Zeitschrift fur Gastroenterologie ( Z. Gastroenterol. ) ( Germany ) March 9, 2002 , 40/2 (59-66)

CODEN: ZGASA ISSN: 0044-2771

*clostridium difficile.txt*

Item Identifier (DOI): 10.1055/s-2002-20209

Document Type: Journal ; Article Record Type: Abstract

Language: German Summary language: English; German

Number of References: 30

... evacuations/per day). The stool cultures were negative and there were no proof both of *Clostridium difficile* and his toxin A and B. In 4 patients colonoscopy showed different grades of colitis up to diffuse erythema...

Drug Descriptors:

\*

...cb; folinic acid--drug therapy--dt; glucocorticoid--drug combination--cb ; glucocorticoid--drug therapy--dt; glucocorticoid--oral drug administration--po; metronidazole--drug combination--cb; metronidazole--drug therapy--dt; metronidazole--intravenous drug administration--iv; prednisolone--drug combination--cb; prednisolone --drug therapy--dt; prednisolone--oral drug administration --po; probiotic agent--drug combination--cb; probiotic agent --drug therapy--dt; vancomycin--drug combination--cb; vancomycin--drug therapy--dt; vancomycin--oral drug administration--po

Medical Descriptors:

...antibiotic therapy; apoptosis; article; bacterial infection--diagnosis --di; cancer palliative therapy; clinical article; clinical feature; *Clostridium difficile*; colonoscopy; corticosteroid therapy; diarrhea--complication--co; differential diagnosis; disease course; disease severity; drug megadose; feces...

Orig. Descriptors:

20/3, K/12 (Item 3 from file: 73) Links

Fulltext available through: STIC Full Text Retrieval Options

EMBASE

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0078387304 EMBASE No: 2000436914

Treatment and prevention of antibiotic associated diarrhea

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Author email: berezbiol@aol.com

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International Journal of Antimicrobial Agents ( Int. J. Antimicrob. Agents ) ( Netherlands ) December 1, 2000 , 16/4 (521-526)

CODEN: IAAGE ISSN: 0924-8579

Publisher Item Identifier: S0924857900002934

Item Identifier (DOI): 10.1016/S0924-8579(00)00293-4

Document Type: Journal ; Article Record Type: Abstract

Language: English Summary language: English

Number of References: 25

...5 to 25%. The major form of intestinal disorders is the pseudomembranous colitis associated with *Clostridium difficile* which occurs in 10-20% of all AAD. In most cases of AAD discontinuation or... ...of vancomycin therapy) had a significant decrease in *C. difficile* colony-forming units, and of toxin B production. In several clinical randomised trials (versus placebo), *S. boulardii* has demonstrated its effectiveness by...

Drug Descriptors:

\* ...agent--adverse drug reaction--ae; \*antibiotic agent--clinical trial--ct; \*antibiotic agent--drug therapy--dt; \**Clostridium difficile* toxin A--drug toxicity--to; \**Clostridium difficile* toxin A--endogenous compound--ec; \* *Clostridium difficile* toxin B--drug toxicity --to; \**Clostridium difficile* toxin B --endogenous compound--ec; \*probiotic agent--clinical trial--ct; \* probiotic agent--drug therapy--dt

clostridifficile.txt

...colestipol--clinical trial--ct; colestipol--drug therapy--dt; cotrimoxazole--drug therapy--dt; cotrimoxazole--parenteral drug administration--pa; cytotoxin--drug toxicity--to; cytotoxin --endogenous compound--ec; enterotoxin--drug toxicity--to; enterotoxin --endogenous compound--ec; fusidic acid--clinical trial--ct; fusidic acid --drug therapy--dt; fusidic acid--oral drug administration --po; metronidazole--clinical trial--ct; metronidazole--drug therapy--dt; metronidazole--oral drug administration--po; quinolone derivative--drug therapy--dt; teicoplanin--clinical trial--ct; teicoplanin --drug therapy--dt; teicoplanin--oral drug administration--po ; tetracycline derivative--drug therapy--dt; tetracycline derivative-- oral drug administration--po; vancomycin--clinical trial--ct; vancomycin--drug therapy--dt; vancomycin--oral drug administration--po

Medical Descriptors:

article; *Bifidobacterium longum*; clinical trial; *Clostridium difficile*; colony forming unit; disease severity; drug efficacy; drug safety; drug withdrawal; *Enterococcus faecium*; hospital hygiene...

Orig. Descriptors:

20/3\_K/13 (Item 4 from file: 73) Links

Fulltext available through: STIC Full Text Retrieval Options

EMBASE

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0077673666 EMBASE No: 1999159858

*Clostridium difficile* infection in children

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*Clostridium difficile* infection in children

Drug Descriptors:

\* anion exchange resin; antibiotic agent--adverse drug reaction--ae; antibiotic agent--drug administration--ad; antibiotic agent--drug therapy--dt; antibiotic agent--pharmacokinetics--pk; antineoplastic agent; *Clostridium difficile* toxin A; *Clostridium difficile* toxin B; colestyramine; cytotoxin; enterotoxin; immunoglobulin A--endogenous compound--ec; metronidazole--adverse drug reaction--ae; metronidazole--drug administration--ad; metronidazole--drug therapy--dt; metronidazole --pharmacokinetics--pk; neurokinin--endogenous compound--ec; receptor --endogenous compound--ec; vancomycin--adverse drug reaction--ae; vancomycin--drug administration--ad; vancomycin--drug therapy--dt; vancomycin--pharmacokinetics--pk; virulence factor

Medical Descriptors:

\* bacterial infection--diagnosis--di; \*bacterial infection--drug therapy--dt; \*bacterial infection--therapy--th; \**Clostridium difficile* bacterial colonization; bacterium culture; breast feeding; breast milk; colitis--side effect--si; cost effectiveness analysis; dehydration--complication--co; diarrhea--side effect--si; drug... . . . linked immunoassay; gastrointestinal symptom--side effect--si; human; *Lactobacillus*; nephrotoxicity--side effect--si; nonhuman; oral drug administration; receptor binding; relapse; review; *Saccharomyces boulardii*; symptomatology

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20/3,K/14 (Item 1 from file: 155) Links

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12762651 PMID: 9691734

[Clostridium difficile infections. Current aspects]

Infezione da Clostridium difficile. Aspetti attuali.

Fulgione V

II Divisione Medica, Azienda Ospedaliera S. Filippo Neri, Roma.

Recenti progressi in medicina ( ITALY ) Jul-Aug 1998 , 89 (7-8) p385-94 , ISSN: 0034-1193--Print Journal Code: 0401271

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[Clostridium difficile infections. Current aspects]

Infezione da Clostridium difficile. Aspetti attuali.

Clostridium difficile is a gram-positive anaerobe that forms subterminal spores. It is now one of major... the natural microflora has been modified by antibiotic therapy. Toxigenic strains of *C. difficile* produce toxin A (enterotoxin) or toxin B (cytotoxin) or both with cause the cytotoxic effect "rounding". *C. difficile* can spread from patient... diarrhea (antibiotic associated diarrhea) to fatal pseudomembranous colitis (PMC). The current therapy is based on oral administration of metronidazole or vancomycin . In patients non responders or that continue to relapse can be used other forms of therapy: antibiotic (teicoplanine, bacitracine, rifamixine); anion exchange resin (colestipol, colestiramine); probiotic therapy (*S. boulardii*, lactobacilli and fecal enemas). New and improved studies will lead to new ...

Descriptors: \*Clostridium difficile; \*Enterocolitis, Pseudomembranous

20/3,K/15 (Item 2 from file: 155) Links

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08424057 PMID: 3679541

Immunization of adult hamsters against Clostridium difficile -associated ileocectitis and transfer of protection to infant hamsters.

Kim P H; Iaconis J P; Rolfe R D

Department of Microbiology, Texas Tech University Health Sciences Center, Lubbock 79430.

Infection and immunity ( UNITED STATES ) Dec 1987 , 55 (12) p2984-92 , ISSN: 0019-9567--Print Journal Code: 0246127

Contract/Grant No.: R01-A121489; United States PHS

Publishing Model Print

Document type: Journal Article; Research Support, U.S. Gov't, P.H.S.

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Immunization of adult hamsters against Clostridium difficile -associated ileocectitis and transfer of protection to infant hamsters.

In this investigation, the role of antibodies against Clostridium difficile toxins A and B in protecting hamsters against *C. difficile*-associated ileocectitis was examined. We... against disease. Neutralizing antibodies to toxins A and B could be demonstrated in both maternal milk and serum, as well as in infant serum and intestinal contents. Foster-mothering experiments demonstrated... protection of

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infants against *C. difficile*-associated ileocectitis was transferred to infant hamsters through breast milk. These results suggest that toxin A may play a more important role in the pathogenesis of *C. difficile*-associated ileocectitis in hamsters than toxin B. Furthermore, variations in the severity of *C. difficile*-associated illness in infants and adults may... (

Descriptors: ; Administration, Oral; Animals; Antibodies, Bacterial --analysis--AN; Bacterial Toxins--immunology--IM; Cricetinae; Enzyme-Linked Immunosorbent Assay; Immunization; Milk--immunology--IM; Pregnancy

Named Person:

20/3,K/16 (Item 1 from file: 399) Links  
CA SEARCH(R)  
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126211021 CA: 126(16)211021r PATENT  
Avian antitoxins to *Clostridium difficile* toxin A  
Inventor (Author): Williams, James A.; Kink, John A.; Clemens, Christopher M.; Carroll, Sean B.  
Location: USA  
Assignee: Ophidian Pharmaceuticals, Inc.  
Patent: United States ; US 5601823 A Date: 19970211  
Application: US 161907 (19931202) \*US 429791 (19891031) \*US 985321 (19921204)  
Pages: 43 pp. Cont.-in-part of U.S. Ser. No. 985, 321.  
CODEN: USXXAM  
Language: English  
Patent Classifications:  
Class: 424167100; A61K-039/395A; C07K-016/02B; C07K-016/12B

20/3,K/17 (Item 1 from file: 149) Links  
TGG Health&Wellness DB(SM)  
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01811857 Supplier Number: 53408468 (USE FORMAT 7 OR 9 FOR FULL TEXT )  
Recognizing and Managing *Clostridium difficile*-Associated Diarrhea.

Miller, Joanne M.; Walton, Jane C.; Tordecilla, Lydia L.  
MedSurg Nursing , 7 , 6 , 348(1)  
Dec ,  
1998  
Publication Format: Magazine/Journal; Refereed  
ISSN: 1092-0811  
Language: English  
Record Type: Fulltext; Abstract Target Audience: Professional  
Word Count: 5140 Line Count: 00464  
Recognizing and Managing *Clostridium difficile*-Associated Diarrhea.

Abstract: *Clostridium difficile* is responsible for over 75% of the diarrhea-associated enteric infections acquired during a hospital...  
Abstract:

Text:

*Clostridium difficile*-associated diarrhea poses a significant physical risk and cost to the recovery of hospitalized older...

...mucoid, malodorous stools a day. His temperature is 101 F rectally. A stool specimen for *Clostridium difficile* (*C. difficile*) toxin is obtained and is positive.

## clostridium difficile.txt

Diarrhea can pose a significant health threat...

...to 20% in older debilitated patients (Holmes & Notarangelo, 1987).

### Risk factors

According to Bartlett (1986), *clostridium difficile* should be suspected as an enteric pathogen in any patient who develops a diarrhea or...

...Intestinal obstruction

- \* Hirschsprung's disease

- \* Necrotizing enterocolitis

- \* History of cerebral toxoplasmosis or cytomegalovirus infection

### Pathophysiology

*Clostridium difficile* is an opportunistic spore-forming gram-positive anaerobic bacillus. It produces at least two exotoxins, *clostridium difficile*, toxin A, primarily an enterotoxin, and toxin B, a cytotoxin (Gerding et al., 1995). These toxins bind to the colon receptors and are...

...Most of the antibiotic associated diarrhea and all cases of pseudomembranous colitis are caused by Toxin A (Walker et al., 1993). Recent studies indicate both toxins are active and contribute to cellular...responsible for the antibiotic-associated colitis, several laboratory tests have been developed that detect cytotoxin (toxin B) and the endotoxin (toxin A) (Bartlett, 1997; Gerding et al., 1995). Most infectious disease authorities indicate that the most common diagnostic tests for *C. difficile* are the cytotoxin assay which identifies toxin B, and the *C. difficile* organism culture. Generally, it is recommended that both the cytotoxin assay...

...Bartlett, 1992). Currently, new enzyme immunoassay tests (EIA) can provide more immediate results and detect toxin A (Rush Medical Laboratories, 1996). For further information on current laboratory tests for *C. difficile* refer...Monitor for re-occurrence.

### Management

- \* Enforce strict contact isolation (begin before diagnosis).

- \* Avoid antiperistaltic agents.

- \* Administer appropriate medications (metronidazole, cholestyramine, yeast preparations, oral vancomycin).

- \* Maintain adequate fluid and electrolyte balance.

- \* Prevent falls.

- \* Maintain skin integrity.

- \* Provide psychological support...

...colitis (Bartlett, 1997).

The nurse should carefully monitor the number, consistency, and amount of stools. Oral and intravenous intake, urinary output, and frequent weights must be done. Assessments for dehydration -- thirst...

...to stop the implicated agent, provide supportive measures, avoid the use

clostrdifficile.txt

of antiperistaltic agents, and administer specific antimicrobial agents when ordered. Supportive measures include essential rehydration with appropriate electrolytes and correction...

...resins, and medications that alter fecal flora. Metronidazole (250 mg to 500 mg tid) or oral vancomycin (125 mg to 500 mg qid) for 7 to 14 days are the usual...

...same course (LaMont, 1995). Vancomycin also has a bitter taste and is nephrotoxic and ototoxic. Oral vancomycin is preferred over intravenous vancomycin because the IV route does not always reach effective ...it is effective in preventing recurrences of *C. difficile* when used as an adjunct to oral antibiotic therapy (Fekety et al., 1997). *S. boulardii* binds to toxin A and reduces or prevents the enterotoxin's effect on the colon but does not permanently colonize the gut (Fekety & Shah, 1993; LaMont, 1995). The use of active culture yogurt to help replace flora has been suggested by some clinicians; however, in studies with experimental animals, yogurt has not prevented antibiotic associated diarrhea (LaMont, 1995). Fecal enemas also have been suggested to...

...require a more complicated treatment regimen, which includes a 10 to 14 day course of oral vancomycin or metronidazole followed by a 3 week course of cholestyramine, cholestyramine plus *Lactobacillus*, and...

...oatmeal, rice, potatoes, bananas, peaches, apricots, pears, strawberries) can help relieve diarrhea (Anastasi & Sun, 1996).

Oral rehydration must be quickly implemented "because by the time the first diarrheal stool is passed...assay be done to diagnose *C. difficile*.

Interventions focus on assessing and managing possible complications, administrating specific antibiotics, strict contact isolation, and teaching. Complications of *C. difficile* include fluid and electrolyte...

...uncontrollable diarrhea, and safety risks due to falls. Metronidazole is the first choice antibiotic, with oral vancomycin, cholestyramine, and specific yeast preparations as alternative or concurrent therapy. Maintaining contact isolation prevents...

...the HIV patient. American Journal of Nursing, 96(8), 35-42.

Bartlett, J. G. (1997). *Clostridium difficile* infection: Pathophysiology and diagnosis. Seminars in Gastrointestinal Disease, 8(1), 12-21.

Bartlett, J.G. (1992). Antibiotic-associated diarrhea. Clinical Infectious Diseases, 15, 573-581.

Bartlett, J.G. (1986). *Clostridium difficile*: Pseudomembranous colitis and antibiotic-associated diarrhea. In S. L. Gorbach (Ed.), *Infectious diarrhea* (pp. 157...).

...V., Surawicz, C.M., Greenberg, R.N., Elmer, G. W., & Mulligan, M.E. (1997). Recurrent *Clostridium difficile* diarrhea: Characteristics of and risk factors for patients enrolled in a prospective, randomized, double-blind... .

...Infectious Diseases, 24, 324-333.

Fekety, R., & Shah, A.B. (1993). Diagnosis and treatment of *Clostridium difficile* colitis. Journal of the American Medical Association, 269, 71-75.

Gerding, D.N., Johnson, S., Peterson, L.R., Mulligan, M.E., & Silva, J. (1995). *Clostridium difficile*-associated diarrhea and colitis. Infection Control and Hospital Epidemiology, 16, 456-477. Gurevich, I. (1994...).

...Decazes, J., Lagrange, R, Modal, J., & Molina J. (1997). Prevalence

clostridifficile.txt  
of and risk factors for *Clostridium difficile* colonization at  
admission to an infectious diseases ward. *Clinical Infectious Diseases*, 24,  
920-924.

Jackson...

...G. (1996). *Gerontologic nursing*. St. Louis: Mosby.  
Manian, F.A., Meyer, L., & Jenne, J. (1996). *Clostridium*  
*difficile* contamination of blood pressure cuffs: A call for a closer  
look at gloving practices in A., Larsson, A.J., Rotschafer, J.C., &  
Guay, D.R.P. (1993). *Clostridium difficile* colonization in  
residents of long-term care facilities: Prevalence and risk factors.  
*Journal of the...*

20/3,K/18 (Item 1 from file: 444) Links  
New England Journal of Med.  
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00113170  
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Weekly Clinicopathological Exercises: Case 25-1994: A 58-Year-Old Woman with Blood  
Diarrhea after Chemotherapy for Carcinoma of the Tongue (Case Records of the  
Massachusetts General Hospital)

Gorbach, Sherwood L.; Graeme-Cook, Fiona; Smith, R. Neal.  
The New England Journal of Medicine  
Jun 23, 1994 ; 330 (25), pp 1811-1817  
Line Count: 00582 Word Count: 08042

**Text:**

...radiation therapy for a stage T4N2cM0 squamous-cell carcinoma of the tongue, followed by the administration of two cycles of fluorouracil, cisplatin, bleomycin, and methotrexate; the second cycle was begun 22... dry heaves, and scanty blood in the stools. The symptoms did not improve after the administration of loperamide and diphenoxylate hydrochloride; the patient became unable to maintain an adequate oral intake and was admitted to the hospital... Specimens of stool were obtained for further studies. Fluids and electrolytes were administered by vein; oxycodone-acetaminophen, diphenoxylate hydrochloride, and loperamide were given by mouth. During the next... abdominal tenderness on deep compression, with diminished bowel sounds. Assay of a stool specimen for *Clostridium difficile* toxin was negative; microscopical examination of a stool specimen showed abundant red cells, without ova... showed no change. A computed tomographic (CT) scan of the abdomen (Fig. 1), performed with oral contrast material, showed diffuse thickening of the large bowel that extended to the rectum; there... During the day, the systolic blood pressure fell to 80 mm Hg. Pressor medications were administered by vein; the trachea was intubated, and assisted ventilation was begun. Ampicillin-sulbactam, gentamicin, and metronidazole were begun by vein; transfusions of fresh-frozen plasma were administered. An emergency laparotomy disclosed 1500 ml of straw-colored fluid in the peritoneal cavity; the... of assay are being used currently. The organism produces two potent toxins, A and B. Toxin A is an enterotoxin and appears to cause the colitis and diarrhea. Toxin B has potent cytotoxicity and is used to advantage in the tissue-culture assay for the... were cytotoxin-negative, at least a third of the isolates produced cytotoxin in vitro. Recently, toxin A-negative, toxin B-positive strains of *C. difficile* have been isolated from infants (Ref. 17,18); such strains... produce positive results on the cytotoxicity assay but would not cause disease; the genes for toxin A production were either missing or greatly reduced in those strains. To date there has been no isolation of a toxin A-positive, toxin B-negative strain, which could produce disease even if the cytotoxicity assay was negative. Nevertheless, it... Dr. Sherwood L. Gorbach's Diagnosis

*clostridium difficile.txt*

*Clostridium difficile pseudomembranous colitis associated with antineoplastic chemotherapy... the State Laboratory Institute from January to August 1993. Investigations have identified undercooked beef, raw milk, and cross-contaminated nondairy food products as sources of the infection. The patient under discussion...*

**Cited References**

1. Anand A, Glatt AE. *Clostridium difficile infection associated with antineoplastic chemotherapy: a review*. Clin Infect Dis 1993;17:109-13.
2. ... fluorouracil. Gastroenterology 1962;43:391-9.
7. Kamthan AG, Bruckner HW, Hirschman SZ, Agus SG. *Clostridium difficile diarrhea induced by cancer chemotherapy*. Arch Intern Med 1992;152:1715-7.
8. Gorbach SL. ... Lyerly DM, Barroso LA, Wilkins TD. *Identification of the latex test-reactive protein of Clostridium difficile as glutamate dehydrogenase*. J Clin Microbiol 1991;29:2639-42.
11. DiPersio JR, Varga FJ, Conwell DL, Kraft JA, Kozak KJ, Willis DH. *Development of a rapid enzyme immunoassay for Clostridium difficile toxin A and its use in the diagnosis of C. difficile-associated disease*. J Clin Microbiol 1991;... PA, Eichelberger K, et al. *Multicenter evaluation of a new enzyme immunoassay for detection of Clostridium difficile enterotoxin A*. J Clin Microbiol 1992;30:1085-8.
13. Shanholtzer CJ, Willard KE, Holter JJ, Olson MM, Gerding DN, Peterson LR. *Comparison of the VIDAS Clostridium difficile toxin A immunoassay with C. difficile culture and cytotoxin and latex tests*. J Clin Microbiol 1992;30:1837-40.
14. Doern GV, Coughlin RT, Wu L. *Laboratory diagnosis of Clostridium difficile-associated gastrointestinal disease: comparison of a monoclonal antibody enzyme immunoassay for toxins A and B with a monoclonal antibody enzyme immunoassay for toxin A only and two cytotoxicity assays*. J Clin Microbiol 1992;30:2042-6.
15. Marler LM, ... LC, Pettigrew Y, Skitt BL, Allen SD. *Comparison of five cultural procedures for isolation of Clostridium difficile from stools*. J Clin Microbiol 1992;30:514-6.
16. Lashner BA, Todorcek J, Sahm DF, Hanauer SB. *Clostridium difficile culture-positive toxin-negative diarrhea*. Am J Gastroenterol 1986;81:940-3.
17. Borriello SP, Wren BW, Hyde S, et al. *Molecular, immunological, and biological characterization of a toxin A-negative, toxin B-positive strain of Clostridium difficile*. Infect Immun 1992;60:4192-9.
18. Depitre C, Delmee M, Avesani V, et al. *Serogroup F strains of Clostridium difficile produce toxin B but not toxin A*. J Med Microbiol 1993;38:434-41.
19. Riley LW, Remis RS, Helgerson SD, et al. ... Holden J, Wu L, Ferraro MJ. *Comparison of four methods in the diagnosis of Clostridium difficile disease*. Eur J Clin Microbiol Infect Dis 1993;12:882-6.
28. Richardson SE, Karmali...

20/3/K/19 (Item 2 from file: 444) Links

New England Journal of Med.

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00112487

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**Weekly Clinicopathological Exercises: Case 6-1994: A 31-Month-Old Girl with Fever, Diarrhea Distention, and Edema (Case Records of the Massachusetts General Hospital)**

LaMont, J. Thomas; Rashid, Asif.

The New England Journal of Medicine

Feb 10, 1994; 330 (6), pp 420-426

Line Count: 00531 Word Count: 07329

**Text:**

...breathing room air; the bicarbonate was 13 mmol per liter. Fluids, electrolytes, and ceftriaxone were administered by vein, and the patient was transferred to this hospital. En route the oxygen saturation... The axillary temperature was 37.2

degreesC after the administration of acetaminophen; the systolic blood pressure was 85 mm Hg. The weight was 9.6...stool, and cerebrospinal fluid were obtained for culture. Fluids, electrolytes, ampicillin, ceftriaxone, and metronidazole were administered by vein. The patient continued to pass frequent loose, greenish stools that were positive for...The bacteria that cause intestinal infection include shigella, salmonella, and campylobacter species, *Clostridium difficile*, toxicogenic or invasive strains of *Escherichia coli*, and *Yersinia* species. *Aeromonas* species and *Plesiomonas shigelloides*... ...hemolysis, uremia, or neurologic deficits. Likewise, infection with *Yersinia enterocolitica*, which is transmitted by raw milk, contaminated foods, or exposure to sick pets, (Ref. 4) would not explain all the findings... ...findings in this patient, several manifestations of the illness are against that diagnosis. Amoxicillin was administered for a pulmonary infection before and during the illness. This antibiotic resembles ampicillin, to which... ...infection (Ref. 11,12). The infection is transmitted from patient to patient by the fecal-oral route, although one hospital outbreak was attributed to the use of rectal thermometers (Ref. 13... ...exotoxins that cause damage to the colonic epithelium and diarrhea (Ref. 14). In animal models toxin A, the enterotoxin, is the primary mediator of enteritis, whereas toxin B, a cytotoxin, does not damage the bowel (Ref. 15). Preliminary *in vitro* studies with human colonic tissue, however, suggest that toxin B is more potent than toxin A in causing morphologic damage (Ref. 16... ...18). As shown in experimental studies in animals, exposure of the intestine to *C. difficile* toxin A causes a marked increase in epithelial permeability, with loss of albumin and other serum proteins... ...group with carbohydrate malabsorption and *C. difficile* infection. Serum and secretory antibodies to *C. difficile* toxin A occur in 50 to 60 percent of children more than two years old, and these... infections. One possible mechanism of antibody protection is that colonic secretions contain IgA directed against toxin A, which blocks its binding to its intestinal receptor (Ref. 25). Children with low serum levels of antitoxin to *C. difficile* toxin A may be more susceptible to relapsing *C. difficile* diarrhea (Ref. 26). In one study of six children with multiple relapses of *C. difficile* colitis and low serum antibodies to toxin A, improvement occurred after treatment with pooled gamma globulin, which contains a high titer of antibody to toxin A (Ref. 27). Thus, selective IgA or IgG-subclass deficiency might explain the recurrent infections and... ...Clinical Diagnosis

*Clostridium difficile* enterocolitisDr. J. Thomas LaMont's Diagnosis

*Clostridium difficile* enterocolitis... ...diagnostic test was a positive enzyme-linked immunosorbent assay for the detection of *C. difficile* toxin A (enterotoxin) and toxin B (cytotoxin) in stool samples (Ref. 35,36... ...After the diagnosis of *C. difficile* colitis was made, vancomycin was administered orally and metronidazole and trimethoprim-sulfamethoxazole were administered intravenously. An assay for *C. difficile* toxin was negative after 13 days, but a sigmoidoscopic... ...loss were slow to resolve, and she did not recover until four weeks after the administration of therapy... ...status may be important (Ref. 24). In that study the serologic status for antibody to toxin A in patients in a hospital who were infected with *C. difficile* correlated with their clinical status. Asymptomatic carriers had a serum level of antibody to toxin A about four times higher than that in patients with diarrhea, suggesting that the status of this child was, antibiotics are often administered intravenously as well as orally. What is the benefit of the intravenous administration?

... ...Dr. LaMont: Intravenous therapy might be advantageous in a patient with ileus. Orally administered metronidazole or vancomycin does not reach the colon in the presence of ileus. One can try enemas of vancomycin or intravenously administered metronidazole, which enters the colonic lumen through the severely inflamed colonic wall. A reasonable approach... ...Anatomical Diagnosis Pseudomembranous colitis associated with *Clostridium difficile* toxin.

#### Cited References

...162:1107-11.

10. McFarland LV, Mulligan ME, Kwok RYY, Stamm WE. Nosocomial acquisition of *Clostridium difficile* infection. *N Engl J Med* 1989;320:204-10.
11. Fekety R, Kim K-H... ...D, Batts DH, Cudmore M, Silva J Jr. Epidemiology of antibiotic-associated colitis; isolation of *Clostridium difficile* from the hospital

clostridifficile.txt

environment. Am J Med 1981;70:906-8.

12. Kaatz GW, Gitlin SD, Schaberg DR, et al. Acquisition of *Clostridium difficile* from the hospital environment. Am J Epidemiol 1988;127:1289-94.

13. Brooks SE, Veal RO, Kramer M, Dore L, Schupf N, Adachi M. Reduction in the incidence of *Clostridium difficile*-associated diarrhea in an acute care hospital and a skilled nursing facility following replacement of... . . .Infect Control Hosp Epidemiol 1992;13:98-103.

14. Lyerly DM, Krivan HC, Wilkins TD. *Clostridium difficile*: its disease and toxins. Clin Microbiol Rev 1988;1:1-18.

15. Triadafilopoulos G, Pothoulakis C, O'Brien MJ, LaMont JT. Differential effects of *Clostridium difficile* toxins A and B on rabbit ileum. Gastroenterology 1987;93:273-9.

16. Riegler M, Feil W, Hamilton G, et al. *Clostridium difficile* toxin B is more potent than toxin A in damaging human colonic mucosa in vitro. Gastroenterology 1993;104:Suppl:A770. abstract.

17. Triadafilopoulos RG, Laughon BE, Thomas DR, Greenough WB III, Bartlett JG. Protein-losing enteropathy associated with *Clostridium difficile* infection. Lancet 1989;1:1353-5.

18. Herman BE, Vargo J, Phillips WS, Sweeney WB . . . 1816-9.

19. Taylor NS, Thorne GM, Bartlett JG. Comparison of two toxins produced by *Clostridium difficile*. Infect Immun 1981;34:1036-43.

21. Sutphen JL, Grand RJ, Flores A, Chang TW, Bartlett JG. Chronic diarrhea associated with *Clostridium difficile* in children. Am J Dis Child 1983;137:275-8.

22. Perlmutter DH, Leichtner AM . . . Laughon BE, Yolken R, et al. Serum antibody response to toxins A and B of *Clostridium difficile*. J Infect Dis 1983;148:93-100.

24. Mulligan ME, Miller SD, McFarland LV, Fung HC, Kwok RY. Elevated levels of serum immunoglobulins in asymptomatic carriers of *Clostridium difficile*. Clin Infect Dis 1993;16:Suppl 4:S239-S244.

25. Kelly CP, Pothoulakis C, Orellana J, LaMont JT. Human colonic aspirates containing immunoglobulin A antibody to *Clostridium difficile* toxin A inhibit toxin A-receptor binding. Gastroenterology 1992;102:35-40.

26. Gryboski JD, Pellerano R, Young N, Edberg S. Positive role of *Clostridium difficile* infection in diarrhea in infants and children. Am J Gastroenterol 1991;86:685-9.

27. Leung DY, Kelly CP, Boguniewicz M, Pothoulakis C, LaMont JT, Flores A. Treatment with intravenously administered gamma globulin of chronic relapsing colitis induced by *Clostridium difficile* toxin. J Pediatr 1991;118:633-7.

28. Wolfe MS. Giardiasis. JAMA 1975;233:1362... . . . 35. Lyerly DM, Phelps CJ, Wilkins TD. Monoclonal and specific polyclonal antibodies for immunoassay of *Clostridium difficile* toxin A. J Clin Microbiol 1985;21:12-4.

36. Lyerly DM, Phelps CJ, Toth J, Wilkins TD. Characterization of toxins A and B of *Clostridium difficile* with monoclonal antibodies. Infect Immun 1986;54:70-6.

37. Price AB, Davies DR. Pseudomembranous...

20/3/K/20 (Item 3 from file: 444) Links

New England Journal of Med.

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00108965

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Medical Progress: Bacterial And Protozoal Gastroenteritis (Review Article)

Guerrant, Richard L.; Bobak, David A.

The New England Journal of Medicine

Aug 1 , 1991 ; 325 (5), pp 327-340

Line Count: 00741 Word Count: 10238

Text:

...highly selective approach to potentially costly diagnostic tests for this common problem is imperative. Although oral rehydration therapy is the cornerstone of treatment for all diarrheal illnesses, the severity of certain... . . .Ref. 13) and

the rates may increase again in the elderly (as seen particularly with *Clostridium difficile* and *salmonella* infections) (Ref. 5,6,14). Although overall morbidity rates in young children in... ...18). *Shigella*, *G. lamblia*, *Entamoeba histolytica* and probably *cryptosporidium* are also transmitted by direct fecal-oral spread among some homosexual men (Ref. 19,20). \*Table 1. Organisms Causing Outbreaks of Diarrhea...is spent each year in the United States (Ref. 58). The popularity of drinking unpasteurized milk and eating raw or undercooked fish, shellfish, and meat brings increasing risks of certain bacterial... ...liver disease who eat raw oysters and unexplained chronic diarrhea after the consumption of raw milk or untreated well water (Ref. 58,65-68). Waterborne outbreaks, usually caused by *G. lamblia*...

...Poisoning Syndromes \*. \*\*TABLE OMITTED\*\* \*Figure 1.-Approach to the Diagnosis and Management of Infectious Diarrhea. Oral rehydration solution can be prepared by adding 3.5 g of sodium chloride (or 3...water and electrolytes (Ref. 145-147). Active immunity, as well as passive protection by breast-milk antibody, lactoferrin, lysozyme, antibody, and other factors help prevent many enteric infections (Ref. 148). Finally ... ...I and possibly II), (Ref. 155-159) by the activation of guanylate cyclase (heat-stable toxin a, including STh or STp), (Ref. 160-162) or through a pathway independent of guanylate cyclase or adenylate cyclase (heat-stable toxin b) (Ref. 163,164). The roles of cholera-like heat-labile toxins or heat-stable toxins... ...pathogenesis of diarrhea with these organisms remain unclear (Ref. 165-168). In addition, *C1. difficile* toxin A, *C1. perfringens* type A, *Staph. aureus*, *Bacillus cereus*, *B. fragilis*, and two recently described Esch...parasites, and blood cultures are unrevealing (Ref. 209). For the majority of noninflammatory illnesses, simple oral glucose-electrolyte rehydration is sufficient, and may be lifesaving. In patients with a suspected inflammatory... ...which remains largely intact even in the severest of diarrheal illnesses, with a simply prepared oral rehydration solution (Fig. 1). Not only is this solution lifesaving in severe diarrhea in which... ...intensive care as well. Furthermore, the output of stool can be reduced with food-based oral rehydration therapy (Ref. 214). With the additional sodium-coupled absorption of neutral amino acids and...the small bowel, analogous to short-chain fatty acids in the colon), (Ref. 215-217) oral rehydration therapy can also be used to speed recovery from bowel injury. The composition of cereal-based oral rehydration solution is like that of standard oral rehydration solution (3.5 g of sodium chloride, 2.5 g of sodium bicarbonate, and... ...1.1 liters of water and brought to a boil (Ref. 214). Not only can oral rehydration therapy (especially with cereal and continued feeding) reverse the loss of fluid, but it... ...major cause of death in children with diarrhea in developing areas (Ref. 218). Furthermore, simple oral rehydration therapy can be started early in the home and can prevent most complications of... ...In addition to oral rehydration therapy, one should consider specific antimicrobial therapy for symptomatic patients with inflammatory or parasitic...

#### Cited References

- ...campuses: a national survey. *Am J Public Health* 1985; 75:659-60.
- 14. Bartlett JG. *Clostridium difficile*: clinical considerations. *Rev Infect Dis* 1990; 12:Suppl 2:S243-S251.
- 15. Guerrant RL, Lohr... ...98:780-5.
- 33. McFarland LV, Mulligan ME, Kwok RYY, Stamm WE. Nosocomial acquisition of *Clostridium difficile* infection. *N Engl J Med* 1989; 320:204-10.
- 34. Aronsson B, Mollby R, Nord C-E. Antimicrobial agents and *Clostridium difficile* in acute enteric disease: epidemiological data from Sweden, 1980-1982. *J Infect Dis* 1985; 151... ...F, Privitera G, Ortisi G, et al Third generation cephalosporins as a risk factor for *Clostridium difficile*-associated disease: a four-year survey in a general hospital. *J Antimicrob Chemother* 1989; 23... ...143:865.
- 37. Cudmore MA, Silva J Jr, Fekety R, Liepman MK, Kim K-H. *Clostridium difficile* colitis associated with cancer chemotherapy. *Arch Intern Med* 1982; 142:333-5.
- 38. Dearing WH...Soc 1984; 32:513-9.
- 43. Bender BS, Bennett R, Laughon BE, et al Is *Clostridium difficile* endemic in chronic-care facilities? *Lancet* 1986; 2:11-3.
- 44. Treolar AJ, Kalra L. Mortality and *Clostridium difficile* diarrhoea in the elderly. *Lancet* 1987; 2:1279.
- 45. Rybolt AH, Bennett RG, Laughon BE, Thomas DR, Greenough WB III, Bartlett JG.

clostridium difficile.txt

Protein-losing enteropathy associated with *Clostridium difficile* infection. Lancet 1989; 1:1353-5.

46. Roberts SH, James O, Jarvis EH. Bacterial overgrowth... .KE, et al An outbreak of a newly recognized chronic diarrhea syndrome associated with raw milk consumption. JAMA 1986; 256:484-90

68. Parsonnet J, Trock SC, Bopp CA, et al...Gastroenterology 1986; 31:708-15.

148. Welsh JK, May JT. Anti-infective properties of breast milk. J Pediatr 1979; 94:1-9.

149. Bohnhoff M, Miller CP, Martin WR. Resistance of... .MK, Hargrett-Bean NT, et al Massive outbreak of antimicrobial-resistant salmonellosis traced to pasteurized milk. JAMA 1987; 258:3269-74.

153. Pavia ...161:255-60.

154. Gorbach SL, Chang T-W, Goldin B. Successful treatment of relapsing *Clostridium difficile* colitis with *Lactobacillus GG*. Lancet 1987; 2:1519.

155. Tvede M, Rask-Madsen J. Bacteriotherapy for chronic relapsing *Clostridium difficile* diarrhoea in six patients. Lancet 1989; 1:1156-60.

156. Kimberg DV, Field M, Johnson... .ST 1a). Infect Immun 1989; 57:649-52.

169. Leyerly DM, Krivan HC, Wilkins TD. *Clostridium difficile*: its disease and toxins. Clin Microbiol Rev 1988; 1:1-18.

170. Kapral FA. *Staphylococcus*... .1450-5.

174. Lima AAM, Leyerly DM, Wilkins TD, Innes DJ, Guerrant RL. Effects of *Clostridium difficile* toxins A and B in rabbit small and large intestine in vivo and on cultured...1978; 2:300-1.

211. Mahalanabis D, Merson M. Development of an improved formulation of oral rehydration salts (ORS) with antidiarrhoeal and nutritional properties: a 'Super ORS.' In: Holmgren J, Lindberg... .Sweden: Studentlitteratur, 1986:240-56.

212. World Health Organization. Diarrhoeal Diseases Control Programme: impact of oral rehydration therapy on hospital admission and case-fatality rates for diarrhoeal disease: results from 11... .Record. Vol. 63. No. 8. February 9, 1988:49-52.

213. Avery ME, Snyder JD. Oral therapy for acute diarrhea: the underused simple solution. N Engl J Med 1990; 323:891-4.

214. Molla AM, Molla A, Nath S, Khatun M. Food-based oral rehydration salt solution for acute childhood diarrhoea. Lancet 1989; 2:429-31.

215. Lima AAM, Khin-Maung U, Guerrant RL. Physiologic basis for oral rehydration therapy of enterotoxigenic *E. coli* and rotaviral diarrhea. In: Guerrant RL, de Souza MA... .114:195-9.

222. Johnson S, Homann S, Quick J, et al Treatment of asymptomatic *Clostridium difficile* (CD) carriers with vancomycin (V), metronidazole (M), and placebo (P).

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Set	Items	Description
S1	38917	S CLOSTRIDIUM(W)DIFFICILE
S2	38917	S S1 OR CLOSTRIDIUM(W)DIFFICILE(W)ASSOCIATED(W)DIARRHEA
S3	1086	S S2 AND PROBIOTIC
S4	9928	S S2 AND (PROBIOTIC OR YOGURT OR (DIETARY(W)SUPPLEMENT) OR LACTOBAC? OR BIFIDOBACTER? OR SACCHAROMYCES OR ENTEROCOCC? OR EUBACTERIA)
S5	742	S S4 AND (IMMUNOGLOBULIN OR ANTIBODY OR ANTIBODIES OR MONOCLONAL OR POLYCLONAL)
S6	991	S S4 AND ((CLOSTRIDIUM(W)DIFFICILE(W)TOXIN(W)A) OR (CLOSTRIDIUM(W)DIFFICILE(W)TOXIN(W)B))
S7	139	S S6 AND (ADMINIST? OR INTRA OR ORAL)
S8	128	RD (unique items)
S9	78	S S8 NOT PY>=2003
S10	78	RD (unique items)
S11	5244	S (CLOSTRIDIUM(W)DIFFICILE(W)TOXIN(W)A) OR (CLOSTRIDIUM(W)DIFFICILE(W)TOXIN(W)B) OR CLOSTRIDIUM(W)DIFFICILE(W)OUTER(W)MEMBRANE PROTEIN
S12	9043	S S1 AND ((TOXIN(W)A) OR (TOXIN(W)B) OR (OUTERMEMBRANE(W)PROTEIN))
S13	9043	S S12 AND S2
S14	1886	S S13 AND (PROBIOTIC OR YOGURT OR (DIETARY(W)SUPPLEMENT) OR

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LACTOBAC? OR BIFIDOBACTER? OR SACCHAROMYCES OR ENTEROCOCC? OR EUBACTERIA)  
S15 267 S S14 AND (ADMINIS? OR INTRA OR ORAL)  
S16 219 RD (unique items)  
S17 224 S S12 AND (PROBIOTIC OR YOGURT OR (DIETARY(W)SUPPLEMENT) OR MILK)  
S18 65 S S17 AND (ADMINIS? OR INTRA OR ORAL)  
S19 22 S S18 NOT PY>=2003  
S20 20 RD (unique items)

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